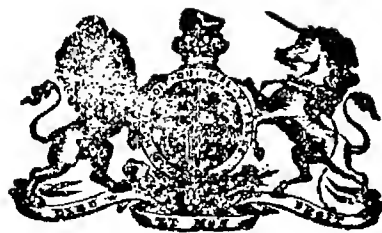


FINAL REPORT  
OF  
REVISION OF SETTLEMENT  
OF A CERTAIN PORTION OF  
JALAUN DISTRICT.

By PHILIP WHITE, Esq.,  
*Dy. Commr. and late Settlement Officer, Jalaun District.*



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No.  $\frac{674}{1-9}$ , dated Allahabad, the 26th November 1889.

From—C. J. CONNELL, Esq., *Secretary to the Board of Revenue, N.-W. Provinces,*  
To—*Chief Secretary to Government, N.-W. Provinces and Oudh, Revenue Dept.*

SIR,—I am desired by the Senior Member to submit, with the following remarks  
*Present:* and the Commissioner's review, Mr. Philip White's final report  
C. A. DANIELL, Esq., (rule 39, Jalaun Rules), on the revision of settlement of that  
*Senior Member.* portion of the Jalaun district which is known as the Jalaun tract.

2. The revision now reported is the sixth since annexation, and it embraced the whole of pargana Orai, 212 villages of pargana Jalaun, 151 villages of pargana Madhogarh, 63 villages of pargana Kunch and 112 villages of pargana Kálpi, with a total area of 726,177 acres, or nearly three-fourths of the whole district. The last settlement of the tract was sanctioned for 20 years from 1st July 1863 to 30th June 1883, but continued to be in force in the case of two parganas (Orai and Jalaun) till 30th June 1883, and in the case of the remaining three parganas till 30th June 1887.

3. The portion of the district which did not come within the scope of Mr. White's revision consists of the old regulation or *kannni* villages of the Kunch and Kálpi parganas, which occupy an area of 214,288 acres settled for periods extending up to 1903-4, and the three chiefships of Rampura, Jagamanpur and Gopalpura, which are held as revenue-free *jágers* covering with the town of Kálpi an area of 50,197 acres.

4. The district of Jalaun is a flat plain of a roughly triangular shape, possessing in the rivers Jumna, Betwa and Pahuj natural boundaries on all sides except where it touches the Datiya and Samthar States on the west and the Baoni State on the east. The total area is 1,548 square miles, of which 67 per cent. is cultivated, 11 per cent. culturable and 22 per cent. barren. About 20 per cent. of the total area consists of unculturable ravines. The lowlands in the centre of the district contain the rich *már* soil, which grows wheat every year without irrigation and often without manure. The southern half of the district, with its *már* and *kábar* soils and comprising the whole of parganas Orai and Kunch, and the lower portions of Kálpi, Jalaun and Madhogarh, is richer and more extensive than the northern half, which contains only *parwa* and *rakar* soils. The population of the district at the census of 1881 was 418,142, or 284 per square mile, having increased since 1865 by 3.1 per cent. There is one village to every two square miles. The population of the Jalaun tract is entered at 279,346, or 246 to the square mile. The Hindus compose 94 per cent. of the whole population. The average culturable area in the possession of each separately recorded proprietor of land is 30.8 acres. The rabi is the chief district harvest, absorbing nearly 58 per cent. of the entire cultivation, and wheat is the most important crop. The Indian Midland Railway now passes through the district, and the communications are excellent. Traffic has hitherto set almost entirely towards Cawnpore, but there is a probability now of its deviation towards Bombay. There are only four towns containing a population of over 5,000 persons, the chief of which is Kálpi. The town of Orai is the headquarters of the district.

5. In para. 15 of his report, Mr. White quotes the following figures in order to compare the areas of the Jalaun tract in 1865-66, when the district was inspected with a view to its permanent settlement, and at the present settlement. He explains that the survey figures of 1853-56, on which the last settlement was based, cannot be conveniently adopted for purposes of comparison :—

	Total area.	Cultivated area.	Uncultivated but culturable area.	Area under groves.	Barren area.	Revenue-free area.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1865-66 ... ..	726,249	465,858	84,750	9,605	146,832	19,198
Present settlement ... ..	726,177	465,984	105,869	7,897	138,572	8,355

The large increase of 20,613 acres in the uncultivated but culturable area is partly due to some land having been thrown out of cultivation in anticipation of resettlement and partly to some land having been transferred from "barren" to "culturable," as the result of the enquiries which were made with reference to the opinion expressed by Sir William Mair, that much land classified as barren land at last settlement was really culturable. The insignificant increase of 126 acres in cultivation shown by the above figures is misleading, as cultivation was to a considerable extent wilfully abandoned to avoid increase of revenue at the present settlement. Mr. White estimates the normal cultivation of khalsa villages to be 474,301 acres by striking the average of the cultivated areas of the years between 1287 and 1290 fasli. Adding to it 8,011 acres on account of resumed muafis, the present cultivated area of the whole tract comes to 482,312 acres; and Major Ternan having based his assessments at last settlement on 432,199 acres of cultivation and 9,922 acres being the old cultivated area of 17 Duboh villages not included in Major Ternan's proceedings (para. 284, pargana Kálpi Settlement Report, 1875), the total area under cultivation at last settlement may be put at 442,121 acres. On these calculations there has been an increase of about 9·1 per cent. in cultivation since last settlement.

6. The area under rabi crops in the Jalaun tract is 279,744 acres, and that under kharif crops is 178,229 acres. The total cropped area amounts therefore to 457,973 acres. The percentages of the last mentioned area covered by the different classes of crops are—

1. Crops of superior value, viz., cotton, daniya, garden vegetables, poppy, &c. ...	9·0
2. Cereals, viz., mixed wheat and gram, juar, bájrā, mixed barley and gram, &c. ...	69·0
3. Pulses or leguminous seeds, viz., gram, moth, arhar, &c. ...	17·6
4. Oilseeds ...	2·6
5. Dyes ...	0·2
6. Fibres ...	0·3
7. Miscellaneous ...	1·3

Among rabi crops, wheat, barley and gram are largely grown and the principal kharif crops are juar, bájrā and cotton. The cultivation of wheat does not seem to have been materially hampered by the deficient supply of water for irrigation, the soil being porous, and consequently capable of retaining moisture. The gram is said to be a remarkably fine crop.

7. Irrigation has hitherto been confined to about 12,728 acres or 2·8 per cent. of the cultivated area in the Jalaun tract; 6,534 acres received their supply of water from 2,870 wells which are mostly kachcha, and the remaining 6,194 acres from other sources not including the Betwa Canal. This canal is a work of the greatest importance, and an interesting memorandum on it, which has been contributed by Mr. W. P. Hörst, Executive Engineer, is printed as Appendix III to Mr. White's report. Jalaun is covered by a large portion of the main length of the canal, and out of 320 miles of distributaries which are either completed or under construction, 298 lie in that district. It enjoys the chief benefits of the canal at present, and any extension of minor distributing channels occurring hereafter is likely to be confined to it. The subjoined figures will show that, since the first opening of the canal in September 1885, there has been steady increase in the area irrigated from it and in the amount of realized water rate in the whole district, viz. :—

Kharif.			Rabi.		
Year.	Area irrigated.	Amount of water rate.	Year.	Area irrigated.	Amount of water rate.
	Acres.	Rs.		Acres.	Rs.
1886-87...	2,677	4,760	1885-86 ...	12,166	13,642
1887-88...	2,290	12,189	1886-87 ...	5,929	16,020
1888-89...	3,478	18,371	1887-88 ...	21,721	51,408
			1888-89 ...	28,072	56,335

The total area of the Jalaun district which will be ultimately reached by the canal distributaries is returned by Mr. Hörst as 971,422 acres. The area actually watered from that source in both the kharif and rabi seasons of 1888-89, after deducting dofashi

irrigation, amounted, however, to 30,916 acres only. The view taken of canal water by cultivators differs in different localities. In many places it has been used readily, while elsewhere "there has been a feeling of apathy or of marked caution." The opening of the canal is described as having had a marked effect on the spring level, which shows a decided rise, and "in a country where the spring level is at a great depth, and where many wells fail in the dry season," this rise is regarded as a decided advantage. The cultivation of wheat, sugarcane and indigo has extended, the greatest advance being in sugarcane. The area under rice is still insignificant owing to the people being ignorant of the methods of its cultivation, but it is hoped that it will become a most important and productive crop with the help of canal water if the cultivators can be induced to promote its growth. Mr. White speaks in glowing terms of the canal and of its present and future effects on the agriculture of the district, *viz.*— "The Betwa Canal is rapidly becoming a potent factor in Jalaun husbandry. The wilderness may not yet have begun to blossom as the rose, but this great public work is surely destined to transform the face of the country, giving the variety and fertility of a garden to the present rude and simple style of cultivation, which never ventures beyond the immemorial *juar* and *bájrá* crops in *kharif* and intermixed wheat and gram in *rabi*. The common use of water as a new element in local agriculture will also naturally tend to civilize, as it were, the rough and unkempt form of tillage at present too much in favour."

8. The table of prices given in para. 40 of Mr. White's report discloses but little fluctuation in the Jalaun tract during the seventeen years ending with 1887, except in the case of *arhar* (*dál*). The quantity obtainable per rupee of this article, which had ranged from 19 to 15 seers between 1870 and 1884, was 30 seers in 1886 and 28 in 1887. The average quantities of the other crops sold per rupee from 1870 to 1887 are 20·6 seers (wheat), 23·5 seers (barley), 8·5 seers (fine rice), 11·5 seers (coarse rice), 23·8 seers (*juar*), 21·8 seers (*bájrá*) and 27·5 seers (gram). As the Indian Midland Railway has opened out easy means of communication with foreign and distant markets, where prices may run high, Mr. White considers that there is now no probability of the cheap prices of the past recurring in Jalaun. The Commissioner states that the prices of Jalaun for the last five years have been higher than those of the Doab, and that the former prices are therefore likely to fall rather than rise under the influence of the latter. The published price lists do not, however, bear out the Commissioner's statement.

9. One thousand seven hundred and ninety estates or parts of estates, with an area of 107,736 acres and paying a revenue of Rs. 1,00,039, were transferred by private sale, public auction or in execution of court decrees during the twenty years ending with 1886, fetching a price of Rs. 10,78,025. These figures give an average of 10·8 years' purchase and Rs. 10-0-1 per acre as the selling price. Mr. White calls this price a satisfactory one, but the Commissioner does not agree with him, and considers it to be low. The percentage of the area of the Jalaun tract affected by alienations is 14·8. In Kálpi not only was the largest area alienated, but the average price paid was lowest. This is said by Mr. White to be due to Kálpi being the worst *pargana* in the district and having large barren ravines. The classes which gained by transfers of land are in the order given—Brahmans, Marwaris, Baniyas, Musalmans and Goshains, while those which have lost ground are Thakurs, Lodhis, Gujars, Kurmis and Ahírs. As elsewhere, much of the land is passing into the hands of the money-lending classes, who, as the Commissioner remarks, seldom make good and enlightened landlords.

Besides the transfers alluded to above, 1,121 estates or parts of estates, with an area of 42,815 acres and paying a revenue of Rs. 42,259, were mortgaged.

10. Mr. White, whose entire service since 1863, with a few brief interruptions, has been passed in the district, and who is therefore the best authority on the subject, states that the revenue assessed at last settlement has always been collected with ease. Six hundred and sixty-two dastaks, 7 or 8 arrests, 30 distraints of movable property, 5 temporary attachments of *maháls*, 1 transfer to a solvent co-sharer, 2 annulments of settlement with direct management, are mentioned as the only coercive processes on

an average annually during the last twelve years. "Matters," says Mr. White, "would be still more satisfactory were it not that the office of lambardār is losing much of its old authority and consequence. \* \* \* \* The utility of the office is coming to be questioned when neither pleasure nor profit seems to attach to it. Weaker men thus begin to fill it; the post loses in influence; the tahsildār is obliged more and more to address himself directly to the individual shareholders for the collection of the revenue and, as a result, coercive processes have the tendency to increase."

11. In pursuance of the instructions contained in Resolution No.  $\frac{2}{141-158}$  of 4th October 1881, of the Government of India, an enquiry was made in 1883 to ascertain whether it was necessary and expedient on financial or administrative grounds to undertake a resettlement of the Jalaun tract, and on what principles the resettlement, if decided upon, could be best effected. A note drawn up by Mr. White showed that an increased revenue of  $1\frac{1}{2}$  to 2 lakhs of rupees might be expected, and that there was no necessity for either a fresh survey or for the preparation of a new record-of-rights, except in the case of 17 villages of Duboh, of which the records were obsolete and untrustworthy. The existing records were, in Mr. White's opinion, sufficiently correct to form the basis of reassessment without general renewal. The jamabandis and khewats were said to have "received unremitting attention" and to be "substantially correct in the matters of proprietary and cultivating occupancy." The village maps were not up to date as regards small changes occurring annually in cultivation and the size of fields, but as they had been left in a satisfactory state at the conclusion of the last settlement, the task of bringing them into exact conformity with existing circumstances was not considered to be likely to entail much trouble. Mr. White not only advocated a resettlement on account of a substantial return in the shape of increased revenue, but urged that there was administrative necessity for it in order to rectify the inequalities of the incidence of revenue arising from the want of system in the plan of assessment followed at the last settlement.

12. The general principles according to which the resettlement of the Jalaun tract was to be conducted were laid down in G. O. No.  $\frac{1495}{1-61-14}$  of 15th December 1884, and are briefly as follows :—

- (1) That there should be no fresh survey or preparation of new records except in the case of the 17 Duboh villages.
- (2) That the assessment of the new revenue should be based as far as possible on the average actual recorded rental, corrected where necessary for sir land and land held on nominal rent, for fraudulent concealment of actual rent, and for land recorded as rent-free or held on manifestly inadequate rent, the average actual recorded rental being ordinarily calculated from the village papers of the last six years, and a preliminary verification of these papers being first made with the object of seeing that they correctly represented the real circumstances of each estate's rental and cultivation, &c.
- (3) That in the cases of rent-rolls which were rejected on account of fraudulent understatement of actuals, a basis of assessment should, if local enquiry failed to elicit the real rentals, be obtained by working out the soil areas of the villages concerned from the soil classification in the existing khasras or in the khasras amended after preliminary verification, and by applying to those soil areas the rent rates ascertained during the process of verifying village papers to be actually paid by tenants for land of the same quality and character in the vicinity.
- (4) That the reasons for which the rejection of the recorded rent-rolls for fraud were considered necessary, and the calculations by which the assumed basis of assessment was arrived at should be fully reported for examination by the Commissioner and the Board.

- (5) That where, after making every allowance for the peculiar circumstances which may have led to low or nominal rates being realized, the rent-rolls were rejected on account of manifest and serious inadequacy, either the procedure referred to above as regards rent-rolls rejected for fraud should be followed or the rents should, if the proprietors agreed, be determined by the Settlement Officer under sections 70-72 of Act XIX of 1873.
- (6) That in assessing *sir* land cultivated *bond fide* by proprietors with their own stock and servants and not let to sub-tenants, a deduction of 25 per cent. should be made from the rental assets calculated at actual or assumed tenants' rates.
- (7) That *bhaiyachára* brotherhoods and other communities of cultivating landholders should be leniently treated.

In G. G. O. No. 15R. of 5th January 1884, the Government of India laid great stress on the necessity for a lenient valuation of *sir* land. It was observed that the application of tenants' rates to *sir* land might be oppressive in some villages, while in others the extent of tenants' land of similar quality in the immediate neighbourhood might be too small to provide a safe basis for the assessment of *sir* land. For the purpose of ensuring moderation in correcting the *sir* rental, the Government of India proposed to fix 16 per cent. as the maximum enhancement on the fully assessed portion of the whole tract under settlement, and to similarly restrict the enhancement on any individual estate so far as that enhancement was not due to increase of cultivation. But the Local Government, after consulting the Board, represented that the object in view would be fully secured by the abatement of 25 per cent. on the corrected rental of all land cultivated by the proprietors as *sir*, and that to prescribe a general maximum limit of enhancement would prevent the proper adjustment of the existing *jamas* which were very unevenly and irregularly distributed over individual estates, and the equable distribution of the future *jamas* on the basis of the actual rental assets. It was further urged that the imposition of a maximum limit of enhancement for individual estates would be inconsistent with the principle according to which the *jamas* are fixed at or about one-half of the rental assets, and finally that no percentage could be fixed which would be high enough to secure the adequate assessment of profitable but under-assessed estates and at the same time low enough to prevent the over-assessment of already fully assessed estates. In the result the Government of India consented to the abandonment of the maxima limits of enhancement on the understanding that the total increase of revenue in the whole tract would not exceed "about a lakh of rupees," that the half assets rule would not be rigidly enforced whenever its application was likely to press heavily on individual estates and that *sir* land would be leniently assessed.

These principles were subsequently embodied in a complete set of rules, of which a printed copy accompanies this review; with a few minor alterations they have also been applied to the resettlement of the Bulandshahr, Muzaffarnagar and Saharanpur districts.

13. Mr. White has not specially noticed the work done under the instructions contained in Part I of the Rules, *i.e.*, "Procedure before Assessment;" but it is understood that the verification and correction of the village maps and records were carried on in substantial accordance with the prescribed procedure. The inspection of villages for purposes of assessment was made by Mr. White himself. After a careful examination of the rent-rolls and of the results of his own inspections, he formed four circles for each of the three parganas, Jalaun, Kunch and Madhogarh, and five circles for each of the two parganas, Orai and Kálpi, by classifying villages "according to the rent rates recorded for tenants' lands in the village rent-rolls." For instance, in the case of pargana Jalaun he grouped in the 1st circle all villages of superior *már* soils, in which the general rent rate was above Rs. 4-8-0 per acre, placing in the 2nd, 3rd and 4th circles villages having general rent rates of between Rs. 3-8-0 and Rs. 4-8-0, between Rs. 2-8-0 and Rs. 3-8-0, and below Rs. 2-8-0 per acre respectively. The four classes of natural soil for which standard circle rates were then framed are *már*,

*kábar*, *purwa*, and *rakar*. A description of these soils will be found in the marginal note in para. 22 of Mr. White's report and need not be repeated here. The standard circle rate for each class of natural soil in each pargana is given in the appendix attached to this review. The entries in the verified rent-rolls regarding the holdings of cash-paying tenants containing the soils and belonging to the circles concerned furnished the data for the deduction of their standard rates. As Mr. White observes :—"The great basis of the revision was to be the village rent-rolls," and his cardinal object therefore "was to maintain them to the utmost, totally rejecting them for fraudulent causes as seldom as possible." After a very close examination, analysis and inter-comparison of the different recorded rentals, Mr. White had to admit that "the village papers nowhere absolutely and fully exposed actual rent-rolls." But this was perhaps too much to expect, and he considered that what he had to do "was to accept the rent-rolls unless palpably bad." Where they were fairly full, he further thought it expedient and conducive to moderation, with reference to the restriction as to total enhancement which had been laid down by the Government of India, to make due allowance for the ordinary risks attendant on rent collections, and he describes his operations in this respect as follows :--

"Accordingly I gave drawbacks on the rental, ranging from  $\frac{1}{16}$ th or one anna in the rupee ( $6\frac{1}{4}$  per cent.) in superior villages to  $\frac{1}{8}$ th or two annas in the rupee ( $12\frac{1}{2}$  per cent.) in inferior ones. In the former cases the fertility of productiveness reduces the risk to very small dimensions; in the latter there is more uncertainty, and cultivators are consequently more unpunctual in paying up. This provision of allowances enabled me in numerous instances to compromise with the necessity of rejecting obnoxious rent-rolls. Where the corrected rent-roll of an estate was full or reasonably full, I made the ordained abatement on the whole tenancy rental. But, as often happened, where the recorded occupancy rent was at a rate markedly below what was paid in the same village by tenants-at-will, I made the abatement on the latter rental only; and again where the whole rent-roll was tangibly short of a full rental, yet was not so bad as to demand total rejection, I entirely withheld the abatement, taking in these latter cases the direct half of the rent-roll for the new jama. *Sir* had already received its free-handed reduction of 25 per cent. and required no further drawback."

Mr. White's procedure in this matter of allowances for rental arrears follows the principles laid down by the Board and approved by Government [cf. para. 13 of Government Resolution No. 928 of 1st June, 1880, on the last settlement report of pargana Kálpi], viz., "to use as the guide to assessment the full current rates of rent, to enter the rates of rent thus obtained in the Nos. II and III statements and then to assess below the full rates, making allowance for the variations of seasons and losses from deductions or bad debts on account of the deficiencies of the crop." Rule 19 of the Jalaun settlement rules also allows the Settlement Officer, for any special reasons, to take a higher or lower percentage than 50 of the rent-roll.

14. Mr. White avoided the necessity for rejecting many rent-rolls which were inadequate, but not so as to necessitate complete rejection, by taking a full 50 per cent. as jama without any abatements. The rent-rolls of 170 maháls or 17.9 per cent. were rejected for fraud, wilful inadequacy or intentional abandonment of cultivation. The corrected rental of these maháls amounted to Rs. 2,76,065, while the assumed rental which formed the basis of assessment was Rs. 3,06,978. The Board have carefully examined the assessment statements of these maháls and passed suitable orders.

15. In correcting rent-rolls, the verified rentals of exproprietary tenants, occupancy tenants, tenants-at-will and tenants of sub-let *sir* were accepted as coming in the class of "tenants" holding at full cash rents. Khudkásht lands, lands held on nominal rents, and *sir* lands cultivated by proprietors or their servants were, under clauses (1) and (3) of rule 13, valued at the average rent-rates of tenants, a deduction of 25 per cent. being made in the case of the last class of land. The average tenants' rates used by Mr. White in valuing *sir* and khudkásht, &c., lands in parganas Jalaun and Orai, were

those paid by tenants-at-will only. But it was explained to him by the Board that no distinction having been made in the rules between tenants-at-will and occupancy tenants, and both having been taken to be tenants paying full rents, the incidence should be struck on the total rental paid by both, and the average rates thereby obtained should be applied to *sir* and khudkásht lands. This instruction has been followed by Mr. White in the case of parganas Kunch, Kálpi and Madhogarh. But, as will be seen, the differences between the rates according to the two methods are not material, viz.:—

				Average rate paid by both occupancy tenants and tenants-at-will.	Average rate paid by tenants-at-will.
				Rs. a. p.	Rs. a. p.
Madhogarh	...	...	...	3 7 9	3 9 8
Kunch	...	...	...	3 11 1	3 12 4
Kálpi	...	...	...	2 8 11	2 9 8

16. In regard to leniency of assessment, and the restriction of the total increase to about a lakh of rupees, Mr. White has made his utmost endeavour to carry out the wishes of the Government of India. He not only accepted without reduction the whole area of 95,124 acres, which was recorded as *sir* in the jamabandis, but admitted an additional area of 3,947 acres as *sir* in the course of the verification of the records. The total *sir* is therefore 99,071 acres or 21·6 per cent. of the cultivated area of the revenue-paying portion of the Jalaun tract, and 16,242 acres out of this total were found to be sublet. The remaining 82,829 acres, cultivated by the proprietors themselves or by their servants, were rated at three-fourths of the average tenant rate. The rental abatements on this account are shown to be as follows :—

						Rs.
Pargana Jalaun	...	...	...	...	...	18,050
Do. Orai	...	...	...	...	...	30,489
Do. Madhogarh	...	...	...	...	...	10,224
Do. Kunch	...	...	...	...	...	6,492
Do. Kálpi	...	...	...	...	...	13,330
Grand Total						78,585

It thus appears that at 47 per cent. of this sum no less than Rs. 36,934 of possible revenue have been abandoned in favour of the landholders. Mr. White found the *sir* to be generally superior in quality to the other lands of the villages. With reference to the general remarks of the Settlement Officer on this *sir* allowance, it is sufficient to note that under the sanction conveyed in G. G. O. No. <sup>832R.</sup><sub>III-3</sub>, of 9th November 1838, the rule has now been modified, and instead of prescribing a fixed and absolute deduction, gives to the Settlement Officers of Muzaffarnagar, Saháranpur and Jhánsi discretionary power to make a reduction of 10 to 15 per cent. in cases where the nature or the cultivation of the *sir* demands it.

In addition to the *sir* allowances, Mr White made the percentage abatements for unrealized rents to which allusion has already been made, he accepted as recorded the occupancy and ex-proprietary rentals, and sayer assets were left unassessed. But notwithstanding this liberal treatment, he was unable to keep down the total enhancement to the limit of about a lakh. To do so would, indeed, have resulted in a sacrifice of Government revenue, for which no reasonable grounds could have been shown and of which Mr. Daniell feels assured the Government would not have approved. The actual increase of revenue in khalsa villages amounted to Rs. 1,11,864. Including the revenue assessed on resumed revenue-free holdings the total increase comes to Rs. 1,25,755.

17. The number of maháls held under each kind of proprietary tenure, together with their area and revenue, are as follows :—

				Number of maháls.	Area in acres.	Revenue. Rs.
Zamindári	...	...	...	356	208,786	1,90,582
Perfect pattidári	...	...	...	35	9,442	15,482
Imperfect pattidári	...	...	...	546	491,052	5,33,852
Bhāiyachāra	...	...	...	18	16,897	14,813
Total				950	726,177	7,54,229



18. The proportion of land held as *sir* and *khudkásht* appears to have increased since last settlement, and they cover at present 39 per cent. of the total cultivation. Occupancy rights have grown at a small and slow rate, if at all, as the tenants exercising those rights hold 22·9 per cent. of the cultivated area now against 20·8 per cent. at last settlement. The different classes of cultivators with the areas and the recorded rentals, after verification of their holdings, are shown below :—

	Number.	Cultivated area in acres.	Rent. Rs.	Average number of cultivated acres in the occupation of each cultivator.
Tenants-at-will...	19,978	172,531	6,24,937	8·6
Occupancy tenants	11,847	102,577	3,43,067	8·7
Ex-proprietary tenants	194	2,074	5,598	10·7
Khudkásht	5,497	61,468	1,87,329	11·7
Sir	8,676	99,071	2,19,177	11·4
Favoured	6,556	17,252	28,660	2·6
Total	52,748	457,973	14,08,768	8·7

19. There are altogether 714 *muáfi* plots with an aggregate area of 13,914 acres, as shown below :—

	Number.	Area.
Muáfis on half jama	295	5,063·50
Life muáfis	218	7,073·08
Conditional muáfis	197	1,366·52
Perpetual muáfis	4	410·98

The amount paid at present to Government as revenue for *muáfis* on half jama and for 33 *maháls* in 26 villages held under beneficial tenures, *i.e.* as *ubáris*, &c., is Rs. 16,112. Their provisional full revenue is estimated at Rs. 34,923, so that Government foregoes annually on their account Rs. 18,811. A sum of Rs. 811-14-0 has been imposed as the 12 per cent. local rate on 138 plots of revenue-free land with an area of 3,144 acres, of which the provisional revenue amounted to Rs. 6,769. The number of plots which, being revenue-free holdings yielding less than Re. 1, or religious endowments yielding less than Rs. 10, are exempt from payment of local rates under Board's Book Circulars 36—IV and 37—IV is 257. The estimated *jamas* of these plots, which cover an area of 1,214 acres, amount to Rs. 2,169, and the loss to Government by their exemption from payment of rates may be put down at Rs. 261.

20. Progressive *jamas* were sanctioned under rule 19 in 200 cases to lighten the pressure of large and sudden enhancements. The full demand will be reached after the expiry of eight years from the date on which the settlement took effect, and the total amount which Government will have to forego on account of this postponement is Rs. 63,598. The minimum percentage of increase which the Board declared as entitling a *mahál* to a progressive jama is 30, and under their orders *maháls* in which increases were between 30 and 50 per cent. have been generally allowed initial *jamas* for the first and second years, while those in which the increases were above 50 per cent. have been usually granted initial *jamas* for the first, second and third years. The initial *jamas* were calculated by adding to the existing revenue half or nearly half of the increases. In a few special cases the realization of the full *jamas* has been deferred for longer periods than three years.

21. The difficulty of restricting the increase of revenue in the whole of the Jalaun tract to the limit of about one lakh of rupees, as desired by the Government of India, prevented Mr. White, as already noted, from taking into account the income from *sayer* items. This income was, however, inconsiderable.

22. Cases of assessment above 55 per cent., or below 45 per cent. of the corrected rental, were scrutinized by the Board and suitable orders passed.

23. No allowances were made or claimed under rule 20 for works of improvement constructed by *zamindárs* at their own cost. *Zamindárs* were not found to have anywhere provided irrigation wells which had caused an increase in rents, or to

have incurred any expense in the reclamation of waste lands. Waste lands are generally reclaimed by cultivators holding on favourable leases, by which exemption from payment of rents entirely, or payment of less than the ordinary rates of rent for the first three or four years, is stipulated.

Pargana.	1 Revenue for the last year of the expired settlement.	2 Initial new revenue, exclusive of that of resumed muáfis.	3 Initial new revenue, inclusive of that of resumed muáfis.	4 Final new revenue, exclusive of that of resumed muáfis.	5 Final new revenue, inclusive of that of resumed muáfis.
	Rs.	Rs.	Rs.	Rs.	Rs.
Jalaun ..	1,96,208	2,22,934	2,29,472	2,29,519	2,36,087
Orai ..	1,69,819	2,01,782	2,05,280	2,14,688	2,18,186
Madhogarh ..	1,13,507	1,24,070	1,25,243	1,26,807	1,27,980
Kunch ..	52,887	61,597	62,525	63,175	66,103
Kálpí ..	96,053	1,02,271	1,04,025	1,04,119	1,05,873
Total ..	6,28,474	7,12,654	7,26,545	7,40,338	7,54,229

24. The revenue of the Jalaun tract for the last year of the expired settlement is compared below with the new revenue assessed by Mr. White. Parganavár details of the figures are noted in the margin.

					Rs.
(1)	Revenue for the last year of the expired settlement	...	...	...	6,28,474
(2)	Initial new revenue assessed by Mr. White, exclusive of that of resumed muáfis	...	...	...	7,12,654
(3)	Initial ditto ditto inclusive	...	...	...	7,26,545
(4)	Final ditto ditto exclusive	...	...	...	7,40,338
(5)	Final ditto ditto inclusive	...	...	...	7,54,229
(6)	Percentage of increase of (2) over (1)	...	...	...	13.4
(7)	Ditto ditto (3) ditto	...	...	...	15.6
(8)	Ditto ditto (4) ditto	...	...	...	17.8
(9)	Ditto ditto (5) ditto	...	...	...	20.0

The revenue of the tracts of which the settlement was not revised by Mr. White is as follows :—

Old regulation or kanuni tract of pargana Kunch	...	...	...	...	1,93,947
Ditto ditto ditto Kálpí	...	...	...	...	92,436
Jagamaupur jágir	...	...	...	...	4,754
Total	...	...	...	...	2,91,137

Adding these items to the final new revenue assessed by Mr. White, inclusive of that of resumed muáfis, the revenue of the whole district will amount to Rs. 10,45,366.

25. With respect to the working of the new settlement the Commissioner (Mr. G. L. Lang), remarks :—“ I understand that the new assessments are collected with difficulty, and that considerable arrears of revenue have already acerued. This Mr. Jackson attributes entirely to a succession of three bad years following directly on the new settlement. He is of opinion that the new assessments are not in themselves too heavy, but there is no doubt that the enhancement is strongly resented by the landholders and the successive bad seasons have given colour to their complaints. A native gentleman of great experience, both as a landholder and an official, told me that he thought that the new settlement pressed very heavily on the district; that although the rent rates on which the assessments were framed were fair enough in themselves with regard to the quality of the soil, they were higher than had been hitherto paid; that the tenants never had paid, and were not now prepared to pay a full rent; and that, as the population was sparse and tenants hard to get, the landlords were at their mercy, and could not enhance existing rents with impunity, or get new tenants if they lost the old. There is probably truth in what he says; anyhow it is singularly unfortunate that a series of bad years should have followed so close on the new settlement to accentuate the difficulties of an enhanced demand. Only time will tell, but I much fear that the Deputy Commissioner of Jalaun will, for some years to come, have no easy task to get in his revenue.”

In their letter No. 2109 of 26th September, 1889, the Board pointed out to the Commissioner that the enhanced demand had been based entirely on the recorded rents which had presumably been collected for many years; that in rating the sir lands at

the average tenant rates, a deduction of 25 per cent. had been made on account of proprietary cultivation, although *sir* lands were as a rule better in quality than other lands; that a further deduction, varying from  $6\frac{1}{4}$  to  $12\frac{1}{2}$  per cent., had been made from the tenants' rentals to allow for vicissitudes of season; that progressive *jamas* were fixed in all cases of large and sudden enhancement, and that the increase of revenue in the whole tract, excluding resumed *muáfis*, did not exceed 18 per cent. It was enquired why, in spite of these concessions and considerations, the Commissioner considered that there would be difficulty in collecting the new revenue, and on what grounds the Deputy Commissioner was of opinion that the enhancements were strongly resented by the landholders. The Deputy Commissioner's reply (which, with its enclosures as well as the Commissioner's endorsement on it, and the Board's letter to which it is a reply, is appended to this review) shows that the difficulty of collection, which has hitherto been experienced, is entirely due to the succession of three harvests of a most unfavourable character. The regulation or *kanuni* tract has suffered equally with the tract resettled by Mr. White, and, in Mr. Daniell's opinion, there seems to be no ground whatever for supposing that Mr. White's assessments have been anywhere pitched too high. On the contrary the very lenient nature of the revised assessments has been already explained. Mr. Jackson expects that with two good harvests, of which there is a prospect, any outstanding arrears will be paid up, and that in normal seasons there will be no difficulty in working Mr. White's new settlement.

26. In para. 19 of his report Mr. White shows that the recorded tenant rental evidences a rise in rents of at least 14 per cent. during the term of the expired settlement, while he expresses his own belief that the real rise has not been less than 18 per cent.; and, in his opinion, the rise in rentals, coupled with the increase of 9·1 per cent. in cultivation during the same period, sufficiently accounts for the very moderate increase of revenue obtained at the present settlement. An increase of 14 per cent. in rental would have yielded (excluding resumed *muáfis*) Rs. 86,797 and an increase of 9 per cent. in cultivation Rs. 55,798, or a total increased revenue demand of Rs. 1,42,595. The actual final increase, however, inclusive of resumed *muáfis*, is only Rs. 1,25,755. The comparison made in para. 20 of the report, which shows the incidence of the new revenue of the *Jalaun* tract to be less by 5 annas 2 pies per acre than the incidence of the current revenue of the old regulation or *kanuni* tracts of *parganas* *Kunch* and *Kálpi* on present cultivation, also indicates the leniency of Mr. White's settlement, there being no practical difference between the two tracts in regard to the fertility of the soil. The amount of consideration shown in the valuation of proprietary cultivation will be apparent from the fact that, while *sir* land fetches a rate of Rs. 4-0-8 when it is sub-let to tenants, 82,829 acres of *sir*, to which the 25 per cent. allowance was granted, were only rated for actual assessment purposes at Rs. 2-12-0 per acre.

27. The verified, corrected and standard rentals are as follows in the different *parganas* :—

Pargana.				Recorded rental after verification.	Corrected rental minus <i>sir</i> allowance.	Standard rental minus <i>sir</i> allowance.
				Rs.	Rs.	Rs.
<i>Jalaun</i>	...	...	...	4,47,071	4,82,455	4,80,952
<i>Grai</i>	...	...	...	3,99,104	4,55,150	4,56,658
<i>Mudhogarh</i>	...	...	...	2,57,568	2,71,124	2,69,537
<i>Kunch</i>	...	...	...	1,10,168	1,38,362	1,35,818
<i>Kálpi</i>	...	...	...	1,94,857	2,25,361	2,20,355
				14,08,768	15,72,752	15,72,320

The differences between the corrected and standard rentals were nowhere of material importance. The final revenue, Rs. 7,40,333, exclusive of that of resumed *muáfis*, is slightly over 47 per cent. of the corrected rental and the standard rental and not quite 53 per cent. of the verified, but uncorrected, rental. The incidence on cultivation is Re. 1-9-10, while that of the revenue at last settlement was Re. 1-5-4.

28. Mr. White's jamas were increased in 72 cases and reduced in 2 cases by the Board. The final result of the whole operation has been the enhancement of the old revenue in 733 villages, its maintenance in 153 villages and its reduction in 63 villages.

29. Mr. White prepared revised kistbandis for the collection of the new revenue, which have been sanctioned by the Board and brought into force.

30. The revenues assessed at the five earlier settlements are given below, with the cultivated areas on which they were based, where these are available :—

					Revenue.	Cultivated area.
					Rs.	Acres.
1840	...	...	...	...	4,13,839	...
1841	...	...	...	...	5,77,176	...
1846	...	...	...	...	6,08,428	300,415
1851	...	...	...	...	6,60,886	...
1863	...	...	...	...	6,19,979	4,42,121

31. The Jalaun tract was declared under settlement by Government Notification No.  $\frac{1551}{1-9-61}$  of 24th December 1884, but Mr. White was appointed Settlement Officer in April 1885, and not till September 1885 was he relieved of the duties of District Officer. The work of assessment was practically finished by August 1887, and from 1st October 1887 Mr. White carried on the duties of Settlement Officer in addition to those of District Officer. Settlement operations were declared to be finally closed in Government Notification No.  $\frac{347}{1-61}$  of 14th March 1888. The records were completed, bound and filed by 31st March 1888 on which date also the settlement office dispersed. The revision, which occupied about three years and four months, entailed a total expenditure of Rs. 1,59,434, or Rs. 140 per square mile. As the total increase in land revenue amounts to Rs. 1,25,755, the outlay on settlement operations has been repaid in a little over a year from the date of the collection of the new demand. The revision had been commenced while some of the rules for the Settlement Officer's guidance were still under discussion, and this increased the cost of the operations to some extent. Mr. White has not complied with the direction in clause (5), rule 39, and the Deputy Commissioner will be asked whether he can furnish this information.

32. The dates of Mr. White's assessment reports and the Board's final orders thereon are given below for the different parganas :—

Name of pargana.	Date of Mr. White's assessment report.	Date of Board's final orders.
Jalaun	20th July 1886.	12th November 1886.
Orai...	30th October 1886.	24th February 1887.
Madhogarh	2nd May 1887.	12th January 1888.
Kunch	22nd June 1887.	Ditto.
Kálpi	13th September 1887.	Ditto.

The intervals between these two sets of dates were occupied with the scrutiny of the settlement papers by the Commissioner and the Board and the correspondence which resulted therefrom.

33. Appeals were preferred to the Commissioner against the decision of the Settlement Officer in 27 cases of declaration of assessment under section 45, and in 3 cases of distribution of assessment or redistribution of land and revenue under sections 46 and 47 of Act XIX of 1873. Out of a total number of 30 appeals thus instituted, the Commissioner confirmed the decision of the Settlement Officer in 27 and modified it in 2, remanding one appeal only. Fifteen appeals were presented to the Board against the decision of the Commissioner, and these were rejected, with the exception of two, in which the Commissioner's decisions were reversed.

34. The revised settlement came into force from November 1886 in parganas Jalaun and Orai, and from November 1887 in parganas Kunch, Kálpi and Madhogarh. Mr. White proposes that it should be sanctioned for 20 years from the latter date, i.e., that it should terminate on 30th June 1907. In its No.  $\frac{67}{1-9-22}$  of 14th January 1885,

to the Government of India, the Local Government observed that, as then advised, the term of 20 years appeared the most suitable for the new settlement, but suggested that the consideration of the question might be deferred till the operations were near completion. It would have been desirable if the term of the new settlement could be made coextensive with that of the present settlement of the other parts of the district which, except in the case of three villages of pargana Kálpi transferred from Hamírpur, expires in 1903 and 1904. The expediency of this course was urged by Mr. White himself in para. 27 of his note of 12th May 1883, submitted to the Local Government with Board's No.  $\frac{1107R}{1-122}$  of 15th September 1883, and the Government of India, in G. G. O. No. 15R., of 5th January 1884, approved of the course. For reasons, however, which will be within the recollection of Government, Mr. White's operations could not be commenced in time to admit of the new settlement taking effect immediately after the expiry of the old. Perhaps, as Mr. White now remarks, it may be found possible eventually to avoid the inconvenience of the settlements of parts of the same district expiring on different dates by an extension of the terms of the present settlement of the old regulation or kanoni villages of parganas Kunch and Kálpi, and the three villages referred to above by a few years. But, under any circumstances, the duration of the new settlement cannot be fixed at a shorter term than 20 years, and the Senior Member has therefore no hesitation in recommending, for the sanction of Government, Mr. White's proposal that the settlement should remain in force till 30th June 1907.

35. Mr. White suggests that the district should be renamed after its present headquarters Orai, and the Commissioner strongly supports his suggestion. As the name Jalaun appears to have nothing now to recommend its continuance, but is, on the other hand, productive of some inconvenience, the Senior Member considers that Mr. White's suggestion deserves consideration.

36. To Mr. White is due the credit of having successfully completed the reassessment of the Jalaun district in accordance with the revised principles laid down in the new settlement rules, i.e. on the basis of the existing village records after their careful verification and correction under his personal supervision. The Senior Member is able to report to Government that the new rules have worked satisfactorily, and the revised and cheaper procedure which they embody has since been applied to the districts of the Meerut Division which have come under settlement. Mr. Daniell would bring to the favourable notice of Government the loyalty, industry and ability with which Mr. White has laboured to make the new system a success, and to complete the settlement operations in Jalaun at the earliest practicable date. Mr. White's long and intimate acquaintance with the Jalaun district specially qualified him for the work, and has enabled the Board to accept his proposals with confidence. Maulvi Abdul Hamid, Deputy Collector, and Muhammad Nur-ullah, settlement head clerk, have been of great assistance to Mr. White, and their services have been duly acknowledged in his report.

37. I am to explain that this review has had to be hastily prepared, in the very heavy pressure of other settlement work, to enable Mr. Daniell to submit it to Government before he vacated his office.

I have the honour to be,

SIR,

Your most obedient servant,

C. J. CONNELL,

*Secretary.*

## APPENDIX.

*Statement showing the Settlement Officer's standard circle rent rates per acre for the different classes of natural soils in the different parganas of the Jalaun tract.*

Soils.					Class I.	Class II.	Class III.	Class IV.
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Pargana Jalaun.	Már ...	...	...	...	5 0 0	4 9 0	3 14 0	2 14 0
	Kábar ...	...	...	...	4 8 0	3 14 0	3 0 0	2 4 0
	Parwa ...	...	...	...	4 4 0	3 10 0	2 12 0	1 12 0
	Rakar ...	...	...	...	3 4 0	2 2 0	1 10 0	1 2 0

					Class I, Subdivision A.	Class I, Subdivision B.	Class II.	Class III.	Class IV.
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Pargana Orai.	Már ...	...	...	...	5 12 0	4 14 0	4 4 0	4 0 0	3 0 0
	Kábar ...	...	...	...	5 0 0	4 4 0	3 12 0	2 13 0	2 2 0
	Parwa ...	...	...	...	3 6 0	3 2 0	3 0 0	2 7 0	2 0 0
	Rakar ...	...	...	...	3 2 0	3 0 0	2 7 0	1 10 0	1 4 0

					Class I.	Class II.	Class III.	Class IV.
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Pargana Madhogarh.	Már ...	...	...	...	5 0 0	4 2 0	4 0 0	3 8 0
	Kábar ...	...	...	...	4 8 0	3 9 0	2 15 0	2 2 0
	Parwa ...	...	...	...	4 4 0	3 6 0	2 12 0	2 0 0
	Rakar ...	...	...	...	2 3 0	2 0 0	1 11 0	1 3 0
Pargana Kunch.	Már ...	...	...	...	5 2 0	4 5 0	3 10 0	3 6 0
	Kábar ...	...	...	...	4 15 0	3 14 0	3 3 0	2 14 0
	Parwa ...	...	...	...	3 13 0	3 7 0	2 7 0	1 14 0
	Rakar ...	...	...	...	3 4 0	2 12 0	2 2 0	1 6 0

					Class I.	Class II.	Class III.	Class IV.	Class V.
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Pargana Káipi.	Már ...	...	...	...	4 9 0	3 15 0	3 1 0	2 5 0	2 1 0
	Kábar ...	...	...	...	3 1 0	2 13 0	2 6 0	2 1 0	1 8 0
	Parwa ...	...	...	...	3 6 0	2 10 0	2 6 0	1 15 0	1 5 0
	Rakar ...	...	...	...	2 6 0	1 6 0	1 4 0	1 2 0	1 0 0

## RULES FOR JALAUN SETTLEMENT UNDER ACT XIX OF 1873.

## I.—PROCEDURE BEFORE ASSESSMENT.

1. The Settlement Officer will depute a munsarim to test the village map and khasra. He will take with him the map and khasra of the last settlement, and will use special care in testing all numbers which were entered as uncultivated at that settlement. He will fill in the class of soil against each field, taking it from the khasra of the last settlement for fields then cultivated, and satisfying himself by inspection with regard to fields that have been brought under the plough since then. All corrections in the patwári's map and khasra will be made in red ink.

2. A superior officer, either Deputy Collector or sadr munsarim, will test at least 10 per cent. of the numbers of the map and khasra thus corrected.

3. The corrected khasra shall be faired for use by the Settlement Department. The settlement office will make two copies of the corrected map, one for the patwári and the other for the settlement file.

4. The Settlement Officer will ascertain whether the last jamabandi corresponds with the corrected khasra, and with that view will have every entry in the latter compared with the corresponding entry in the former, and when the two entries differ, will correct the jamabandi entry by that of the corrected khasra.

5. The Deputy Collector will then visit the village, taking with him the following papers :—

- (1) the last khewat filed by the patwári :
- (2) the jamabandi which has been brought to agreement with the khasra :
- (3) the corrected map and khasra.

He will first have the khewat read out and attested. After that the jamabandi as corrected by a comparison with the corrected khasra will be read out, and any alterations agreed on will be made in it. Any disputes will be entered in a list.

The Deputy Collector will take up, and, as far as possible, decide, as directed in sections 69, 70, 71 and 72 of the Act, disputes respecting the class or tenure of a tenant or the rent payable by him during his visit to the village. The substance of his judgments shall be noted opposite the entries to which they refer in the dispute list.

He will also decide all disputes in regard to the khewat entries with due regard to the provisions of sections 64 of the Act.

Each tenant on coming before the Deputy Collector will be required to state what his rent is, and if his statement is agreed to by the zamíndár, the rent will be entered in the jamabandi. If they do not agree, the rent recorded in the patwári's jamabandi will be entered. A fair copy of the jamabandi as finally attested will be made for the settlement file.

6. A finally corrected khasra, to correspond with the fair jamabandi, should be prepared by the patwári under the supervision of the Deputy Collector.

7. A memorandum of the village customs will be appended to each khewat by the Deputy Collector when he attests the jamabandi, and will take the place of the document hitherto known as the wajib-ul-arz.

It will state—

- (1) the manner of the distribution of common profits among the proprietary body ;
- (2) the manner in which lambardárs and co-sharers are to collect from the tenants (section 65 of the Act) ;

- (3) a note of any custom or constitution peculiar to the mahál.

## II.—ASSESSMENT.

8. The Settlement Officer, having obtained the attested rent-rolls for the villages of a pargana or other area, will prepare area tables for each village under the following classes of tenure :—

- (1) sîr—(a) cultivated by proprietors as in rule 17 ; (b) sublet ;
- (2) khudkásht not being sîr ;
- (3) tenants' land at full cash rents ;
- (4) Grain-rented lands, lands held rent-free, or for service, and other favoured tenures.

The Settlement Officer will then make his village inspection and will proceed to frame the corrected rent-rolls of the village in accordance with rule 13.

9. After completing the inspection of a sufficient number of villages, the Settlement Officer will determine what villages may be grouped together for the formation of a standard circle.

A standard circle may correspond with a pargana, or more than one circle may be formed in a pargana, or Settlement Officer may form a circle by classifying villages according to the rent rates recorded for tenants' lands in the village rent-rolls.

10. The Settlement Officer will select a general standard rent rate for each class of soil in the circle. The rent rates selected should correspond, as closely as possible, with the rents recorded as actually paid by cash-paying tenants in the villages which form the circle.

A standard rent-roll will be framed for each village by applying standard rates to the area in the village held by tenants, and by applying the same to land held by proprietors subject to the allowance granted under rule 17 for sîr.

11. The assessment of the revenue in each village is to be based, as far as possible, on the actual rentals as recorded in the village rent-rolls, and corrected where necessary—

- (1) for sîr or khudkásht rated at nominal rates ;
- (2) for land held on grain rents, or land recorded as rent-free, or at manifestly inadequate rents ;
- (3) for fraudulent concealment of assets.

The Settlement Officer shall also be guided in his assessments by the average of the actual rent-rolls of the past six years or of any series of years to the rent-rolls of which the Settlement Officer is able to attach sufficient confidence.

12. The Settlement Officer is not at liberty to include in the assets of an estate or tract of country any prospective rise in rent or any prospective increase in the cultivated area. His estimates should be very strictly confined to assets which he has reason to believe actually exist or have recently existed at the time of settlement.

13. The rent-roll may be corrected in any of the following ways :—

- (1) By striking the incidence of the whole rental paid by tenants paying full rents on the whole area held by them, and applying the rate thus obtained to the area held as sîr, khudkásht and on grain or nominal rents.
- (2) If the rent recorded for the lands of tenants paying full rents agrees with the rent obtained by applying standard rates to those lands, and the classes of soil held as sîr and khudkásht or on grain or nominal rents differ materially from the classes of soil held by tenants paying full rents, the Settlement Officer may correct his rent-roll by applying standard rates to the lands for which the rent-roll has to be corrected.
- (3) If the whole or nearly the whole area of the village is sîr or khudkásht or land held on grain or nominal rents, he should apply the rent rates which he has ascertained during the course of his inspection to be actually paid



by the tenants of neighbouring villages for soils of the same class similarly situated, and with like advantages.

- (4) In villages which contain grain-rented lands, the position and character of such fields must be very carefully ascertained. It will probably be found that the grain-rented land comprises mostly outlying and inferior fields or fields subject to special disadvantages, such as non-resident cultivation, liability to flood, or, if on the outskirts of jungle tracts, to ravages of wild animals. The application of cash rent rates of similar land in the village circle or subdivision of a circle to such areas will require careful consideration ; and due allowance should be made for any special precariousness of crop or uncertainty of cultivation, or for lower receipts as compared with those from cash-rented fields of similar quality.

14. If the corrected village rent-roll agrees fairly with the rent-roll according to standard rates, the Settlement Officer will at once accept the corrected village rent-roll as the basis of his assessment. The Settlement Officer will, throughout his proceedings, give proper weight to the recorded rent-rolls of past years.

15. In cases of divergence of the corrected village rent-roll from the rent-roll according to standard rates, the Settlement Officer will be guided by the following considerations and procedure :—

- (a) If the divergence arises from any peculiar conditions of the village, such as the class of cultivators, character of the soil and cultivation, or the position of village with regard to floods or depredation of wild animals, the Settlement Officer will accept the corrected village rent-roll for his assessment.
- (b) If there are no such special conditions, but the Settlement Officer is convinced that the divergence is due to the fraudulent concealment of rents, or to rents having been let down designedly or without proper reason or excuse, the Settlement Officer may proceed to ascertain the special soil rates admitted to prevail in the village ; or he may apply rent rates which he has ascertained to be actually paid by tenants of neighbouring villages for soils of the same class similarly situated and with like advantages. The Settlement Officer will then determine the sum which is to form the basis for assessment.
- (c) If the corrected rent-roll is inadequate, not on account of the fraudulent understatement of assets, but in consequence of the inadvertence or easy management of the proprietor, the Settlement Officer would usually accept the rent-roll as the basis of assessment if it gives a reasonable increase on the amount of the demand under the expiring settlement.

16. Where the corrected rental is materially in excess of the rental by standard rates, the Settlement Officer should, before accepting the recorded rents as the basis of his assessment, satisfy himself that they are actually paid, and that a revenue demand based on them can be realized without undue pressure on the proprietor.

17. In calculating the revenue, the rates applied to proprietary sîr should be 25 per cent. less than the rates applied to tenant land. All sîr land actually and in good faith cultivated by proprietors with their own stock and servants and by hired labour should be valued at the favourable rate. But inquisitorial investigations into the way in which sîr is managed or divided are not to be resorted to. The Settlement Officer should find no difficulty, in the course of the verification of the rent-rolls, to ascertain and judge to what extent in each estate sîr is to be treated as being under the habitual cultivation of the proprietors.

18. In addition to the assessment on rentals, the Settlement Officer may take into consideration the average receipts from natural products, such as fruits, fish or other sayer, and add them to the total of the corrected rent-rolls : provided that minerals are not to be taken into account as assets. The term "minerals" includes stone quarries, kankar beds and all other underground products.

19. The revenue assessed upon each estate shall ordinarily be 50 per cent. of the rent-roll, with any addition that may be made on account of sayer profits. But large and sudden enhancements of the revenue are to be avoided, even when the corrected rent-rolls would seem to justify them. In such cases the Settlement Officer should consider whether it would not be advisable to realize the enhanced demand by progressive rises spread over a limited number of years, and he should submit definite proposals in each case for the orders of the Board.

In other cases the Settlement Officer may, for any special reason, take a higher or lower percentage than 50 per cent. of the rent-roll. But whenever the proposed revenue exceeds 55 per cent. or falls below 45 per cent. of the gross of the rent-roll, he must obtain the special sanction of the Board to his proposals. The case of a large community of cultivating proprietors will ordinarily be met by the favourable rate assessed on their sirs.

20. Wherever a landlord establishes, to the satisfaction of the Settlement Officer, that increased rents are being actually paid on account of water supply provided by him from wells or other irrigation works constructed either by private capital or by loans under Act XIX of 1883, the increased rents shall not be taken into account until fifteen years have elapsed after commencement of the revised settlement. In other words, wherever, during an expiring settlement, land assessed at that settlement as dry land is found to be paying rent as irrigated land in consequence of an expenditure of capital by the landowner, such land shall continue to be rated at former unirrigated rents for the term of fifteen years from the new settlement. Similarly, whenever a landlord satisfies the Settlement Officer that increased rents are being actually paid on account of land reclaimed at his expense, whether the capital so expended was derived from loans under Act XIX of 1883 or not, the increased rents due to such expenditure shall be exempted from assessment until the expiry of fifteen years from the date of the collection of the revised assessments. The Settlement Officer will also take into consideration any other special outlay made by a landlord during the currency of the expiring settlement otherwise than by means of a loan under Act XIX of 1883. In regard to improvements made with the aid of loans under the said Act, but which do not consist of the reclamation of waste land or of irrigation works, the Settlement Officer will be guided by section 11 thereof.

### III.—REPORT TO BOARD FOR SANCTION.

21. On the completion of the assessment of any pargana, tahsili or area of one or more standard circles, the Settlement Officer should submit a short report, through the Commissioner, to the Board for sanction.

22. The report will be accompanied by the following statements :—

- (a) an aggregate or total statement in the same form as the mahál assessment statements, giving the totals of the villages included in each standard circle in the pargana or tahsili ;
- (b) an abstract statement to show the proposed jama of each mahál separately in the form given in the appendix.

23. The report will contain the following information :—

- (a) the aggregate recorded rentals for the villages included in each standard circle for each class of tenure, i. e., sir, khudkásht, tenant land under real rents and tenant land under grain or nominal rents ;
- (b) the corrected rental under each class, with an account of the method by which the rent-rolls have been corrected ;
- (c) the classes of soil into which the area has been divided, with the area under each class ;
- (d) the standard rates selected for each class of soil, and the reasons by which the selection is supported ;

- (e) the total rental obtained by the application of the standard rates : this should be compared with the corrected rent-roll ;
- (f) the amount, if any, which has been assessed on sayer ;
- (g) the aggregate revenue demand which it is proposed to assess on the villages included in each circle.

24. It should be stated in how many cases the rent-roll has been accepted and in how many it has been rejected as the basis of assessment. The number rejected on account of fraudulent understatement of assets should be given, and the number in which the cause of rejection was the unreasonable inadequacy of the rents. The methods by which true rents have been supplied should be described.

25. The area assessed at favourable rates as landowners' cultivation should be given, and the sum assessed on it. It should be said whether it has been found necessary to reduce materially the area claimed as being under their own cultivation by the landowners.

26. Finally, the proposed assessment should be compared with the expiring demand, and a short account should be given of the causes, such as the rise of prices or rents, competition for land, spread of cultivation, improvement of communications, &c., &c., to which the difference may be attributed.

27. The special reasons for the proposed assessment of each mahál will be entered at the foot of each assessment statement.

28. It shall be the duty of the Commissioner to satisfy himself that the rules laid down in Chapter II have been properly applied in the assessment of the different maháls. For this purpose he will carefully examine the report and the statements which accompany it, and will give special attention to those cases in which the rent-roll has been rejected on the grounds either of fraudulent understatement of assets or of the ascertained inadequacy of assets. He will also have regard to those cases in which there is an exceptionally large area of sir or grain-rented land, or in which the Settlement Officer has materially reduced for assessment purposes the area recorded as sir on the grounds of sub-letting. After he has completed this examination and called for such further information from the Settlement Officer as he may find necessary, he shall forward the report, with the statements mentioned in clauses (a) and (b) of Rule 22, with his opinion as to whether Settlement Officer's proposals should receive the sanction of the Board.

29. On fully considering the reports of Settlement Officer and Commissioner and the statements submitted with them, and calling for such mahál assessment statements as may be thought necessary, the Board shall pass orders confirming or modifying the proposed assessments. The general sanction hereby accorded by the Board will not preclude the exercise by the Commissioner of the power conferred on him by law of adjudicating on the propriety of the assessment in individual cases brought before him on appeal.

#### IV.—PROCEDURE ON DECLARATION OF ASSESSMENT.

30. As soon as the Board's final orders are obtained, the assessment shall be declared, and an agreement shall be taken from the persons with whom settlement is made in the following form :—

" We, the lambardárs of mahál——, pargana——, agree to pay the following revenue on condition of Government sanction from ——to——, and thereafter till the next settlement is made. We admit that the State has reserved to itself all rights in minerals. We agree that if any groves now standing are cut down or decay and are not immediately replanted, the land on which they stand (if it were excluded from assessment) shall be assessed, and the revenue fixed thereon shall be added to the revenue which we now agree to pay.

This engagement shall be witnessed by the kanúngo of the pargana and the patwári of the mahál

In the case of alluvial maháls the engagement will be for five years only, and the following proviso shall be added :—

" Provided that nothing in this agreement shall bar an intermediate revision of assessment in the event of extensive increment or decrement under the rules for the assessment of alluvial maháls.

31. If the last settlement has already expired, the new jama will come into force with the first kharif instalment or rabi instalment following the declaration. If the current settlement has not already expired, the new jama will come into force with the first instalment due after its expiry.

32. The khewat, with the memorandum of village customs, shall be finally attested and signed by the Settlement Officer, or the Assistant Settlement Officer, in the presence of such persons as may attend, sufficient notice having been given beforehand to all the lambarlárs of each mahál and other persons concerned.

33. The distribution of the assessment of each mahál shall be effected by the proprietors themselves, if possible. If not, it shall be carried out by the Settlement Officer on one of the following methods :—

- (1) the assessment of each patti shall bear the same proportion to the assessment of the mahál as the accepted rental of the patti does to that of the mahál ;
- (2) or if the majority of shareholders prefer it, the assessment of each patti shall bear to the assessment of the mahál the same proportion which the fractional interest (in annas, biswas, &c.) which each patti nominally represents bears to the whole mahál.

#### V.—THE SETTLEMENT MISL.

34. The settlement misl to be filed in the Deputy Commissioner's office will consist of the following papers :—

- (1) the corrected village map ;
- (2) the khasra as finally corrected ;
- (3) the attested jamabandi ;
- (4) the khewat and memorandum of village customs ;
- (5) the assessment statement ;
- (6) the kabuliyat ;
- (7) the rubkár akhír.

35. The final proceeding will be a sheet of paper signed by the Settlement Officer and giving the following information only :—

- (1) the date on which the village map and khasra were corrected and the name of the Deputy Collector by whom the work was tested ;
- (2) the date on which the jamabandi was attested and the name of the Deputy Collector by whom it was done ;
- (3) the date on which the khewat and memorandum of village customs were attested, with the name and rank of the officer who made the attestation ;
- (4) the date on which the Settlement Officer directed the complete misl to be made over to the district office.

36. Copies of the khewat and mahál assessment statement, together with a printed copy of the map, will be sent to the tahsíl, and kept in the bastah of haftagána papers filed by the patwáris for each mahál.

37. The patwári will be furnished with a copy of the khewat and attested jamabandi in Hindi and a printed copy of the village map.

VI.—FINAL REPORT.

38. When the last circle reports have been received back from the Board and the procedure above described has been completed for each mahál under settlement, the Settlement Officer will submit his final report.

39. This will contain for the whole tract under settlement in such divisions of it as may seem most convenient for the purpose—

- (1) a general description ;
- (2) fiscal history ;
- (3) comparison of the former and present condition of the tract under report ;
- (4) a general account of the inspection and the extent to which the corrected rent-rolls were accepted as the basis of assessment ;
- (5) the financial results, including an approximate division of the total expense under the following heads :—
  - (a) preparation of records (including litigation),
  - (b) assessment.

Note.—In compiling this part of the report the subheads given in para. 18, Chapters I, II and III of Board's Circular No. 15—I of 28th September, 1875, may be usefully consulted.

40. The report should show, as far as possible, the working of the revised assessments up to date.

41. Tabular statements should be appended, giving for the whole tract under settlement the statistics embodied in the pargana or circle reports.

42. During the continuance of settlement operations the Settlement Officer will submit every quarter, commencing from 1st January, statements showing the progress which has been made in the last three months in the preparation of the records, the disposal of cases and the assessment.

43. With the report for the quarter ending on 30th September, the Settlement Officer will submit by the 1st November an annual report to the Commissioner, which shall be forwarded to the Board's office not later than 15th November, and shall contain a short account of what has been accomplished up to 30th September preceding, and what remains to be done.



No.  $\frac{2109N.}{1}$ , dated Naini Tal, the 26th September 1889.

*From—C. J. CONNELL, Esq., Secretary to the Board of Revenue, N.-W. Provinces,  
To—Commissioner, Jhānsi Division.*

SIR,—In para. 37 of your review of the Jalaun Settlement Report you remark, in regard to the working of the new settlement, that you “understand that the new assessments are collected with difficulty, and that considerable arrears of revenue have already accrued.”

You quote also the present Deputy Commissioner as expressing the opinion that this difficulty is not due to the fact that these new assessments are in themselves too heavy, but to the succession of bad years which have followed their introduction.

2. The enhanced demand was based entirely on the rents recorded in the village jamabandis, and which, it is understood, had been regularly paid for many years. Your quotation, para. 36, of the remarks of a native gentleman is not therefore understood. Further, in rating the sir lands at the average tenant rates, a deduction of no less than 25 per cent. was made on account of proprietary cultivation (para. 21, report), although this was found to be, as a rule, of better quality than the rest of the village lands. Mr. White also made certain considerable deductions (varying from  $6\frac{1}{2}$  to  $12\frac{1}{2}$  per cent.) from the totals of the tenant rentals to allow for vicissitudes of season, &c., and progressive enhancements were granted in all cases of heavy and sudden increase; while excluding resumed muáfis, the total increase did not exceed the very moderate figure of 18 per cent. The past demand had always been collected with ease (para. 10, report).

3. Under these circumstances the Senior Member does not clearly understand the grounds upon which you should fear that the Deputy Commissioner of Jalaun “will for some years to come have no easy task to get in his revenue;” nor how that officer has arrived at the opinion that the very moderate enhancements are “strongly resented” by the landholders. I am to request that you will desire Mr. Jackson immediately after the close of the current revenue year on 30th September to report—

- (a) the names of the maháls, parganawár, in which he has experienced these difficulties in collecting the new jainas;
- (b) the total arrears, parganawár, outstanding on the 30th September;
- (c) the number of processes of each kind which he has had to employ in order to collect the revenue demand between 1st October 1888, and 30th September 1889.

4. As the Senior Member is desirous of submitting the Jalaun Settlement Report to Government before he resigns the service, I am to request that Mr. Jackson's report may be forwarded *at the earliest possible date*.

No.  $\frac{2248N.}{1}$ , dated Naini Tal, the 27th September 1889.

*From—C. J. CONNELL, Esq., Secretary to the Board of Revenue, N.-W. Provinces,  
To—Commissioner, Jhānsi Division.*

SIR,—In continuation of Board's letter No.  $\frac{2109N.}{1}$ , dated 26th September 1889, I am desired to say that no figures have been given in your review of the Jalaun Settlement Report to show—

- (1) number of appeals against Settlement Officer's assessment preferred to you under section 243 of the Revenue Act, and
- (2) results thereof;

and to request that a statement containing the above information may be submitted along with your reply to the Board's letter of the 26th September.

No.  $\frac{294}{I-10}$ , dated the 23rd October 1889.

From—G. L. LANG, Esq., Commissioner, Jhānsi Division,

To—Secretary to the Board of Revenue, N.-W. Provinces.

SIR,—I have the honour to acknowledge the receipt of your No.  $\frac{2109N}{I}$ , dated the 26th September 1889, regarding the Jalaun Settlement Report, and to submit with its original enclosure copy of Jalaun Deputy Commissioner's No. 120, dated the 21st October 1889, just received by me, furnishing the further information called for by the Board in para. 3 of the letter under reference.

2. I also beg to submit a statement showing the number of appeals preferred to me against the Jalaun Settlement Officer's assessments under section 243, Act XIX, 1873, and the results thereof called for in your No.  $\frac{2248N}{I}$ , dated 27th September, 1889.

*Statement showing number of appeals to Commissioner against the assessments of the Settlement Officer, Jalaun, under section 243 of the Revenue Act XIX of 1873.*

Class of case.	No. of appeals.	Confirmed.	Reversed.	Remanded.	Remarks.
Declaration of assessment under section 45 ...	27	26	...	1	
Distribution of assessment or redistribution of land and revenue under sections 46 and 47 ...	3	1	*2	...	Modified.
Total ...	30	27	2	1	

*Copy of a letter No. 120, dated the 21st October 1889, from W. G. JACKSON, Esq., C. S., Deputy Commissioner, Jalaun, to the Commissioner, Jhānsi Division.*

WITH reference to your endorsement No.  $\frac{3}{I-10}$ , dated 1st instant, covering Board's No.  $\frac{2109N}{I}$ , dated 26th ultimo, I have the honour to submit a statement showing (a) the names of the mahāls, parganawār, in which I have experienced difficulty to a greater or less extent in collecting the new jamas; (b) showing the total arrears, parganawār, outstanding on the 30th September 1889; and (c) exhibiting the numbers of processes of each kind which I have had to employ in order to collect the demand of the revenue year just closed.

2. In order to effect a comparison between the recently settled, or partāli tracts and those in which the old settlements are in force known as the kanūni villages, I have appended precisely similar figures for the latter. So far as my limited experience of the district permits me to judge, I think that the difficulties we have experienced are due to adverse seasons only. We have had three successive harvests of a most unsatisfactory character, and as a natural consequence a certain number of mahāls where the coparceners are numerous and destitute of anything in the shape of capital have fallen into serious arrears. It will be seen, however, that kanūni and partāli tracts have suffered similarly, and though the people affect to groan under the burden of the new settlement, I have seen nothing to make me suspect that the demand is unequal or excessive. We have now a magnificent kharif assured, and an unusually promising rabi outlook; and it was only yesterday that I saw the defaulting zamīndārs of one of the worst villages (a kanūni one) who were confident that with two good harvests they could pull themselves clear. I believe that this is so, and that with ordinary seasons the new settlement will work smoothly enough. There will, however, always be villages here and there in trouble owing to the recklessness, extravagance and consequent poverty of many of the large coparceners and the bad and lazy farming that seems to me, coming from a Doab district, to be the prevailing feature of the country; and a special difficulty is that land once thrown out of tillage speedily, in many places, becomes covered with kūs, so that a village which has once fallen to waste is very difficult to pull together again.




## Memorandum required by the Board regarding arrears in certain villages recently resettled.

Mahals in which difficulty has been experienced in collecting new jamas.			Total arrears, pargana-war, on the 30th September 1889.	Number of processes of each kind employed in collecting revenue during 1888-89.	Remarks.
Number.	Mahál.	Revenue of mahál.			
1	2	3	4	5	6
	<i>Partáli villages, pargana Orai.</i>	<i>Rs. a p.</i>			
1	Barsar ...	2,910 0 0	Nil	Out of a total number of 224 maháls 70 were served with 101 dustaks for arrears aggregating Rs. 53,512. No other process was issued in this pargana.	The total number of partáli villages in this pargana is 134, and the total demand is Rs. 2,12,226. The demand in the 31 villages specified in preceding column was Rs. 61,248.
2	Bandhauri ...	1,481 0 0			
3	Pachokhra ...	3,034 0 0			
4	Haidalpur ...	281 0 0			
5	Dhargawan ...	1,990 0 0			
6	Dhamni Buzurg ...	2,470 0 0			
7	Sosa ...	1,878 0 0			
8	Kuthaunda, mahál Pura ...	4,652 0 0			
9	Kusmi ...	1,690 0 0			
10	Kusmilia ...	6,270 0 0			
11	Kurkura, mahál Daya Ram ...	1,010 0 0			
12	Ditto mahál Chhoto ...	480 0 0			
13	Karwi Buzurg ...	753 0 0			
14	Khadani ...	350 0 0			
15	Gadhur, mahál Gursarayan ...	1,557 0 0			
16	Gurha ...	1,560 0 0			
17	Lidhaura ...	192 0 0			
18	Muhamdabad ...	3,911 0 0			
19	Marora ...	2,720 0 0			
20	Minaura, mahál Lirai ...	620 0 0			
21	Minaura Kálpi ...	1,631 0 0			
22	Nunbai ...	655 0 0			
23	Nunsai ...	3,680 0 0			
24	Ikhlaspur ...	1,201 0 0			
25	Orai ...	2,702 0 0			
26	Ajanara ...	1,730 0 0			
27	Bhwa ...	3,391 0 0			
28	Jaisari Kalan ...	8,773 0 0			
29	Nada ...	280 0 0			
30	Narchha ...	1,250 0 0			
31	Parua ...	1,143 0 0			
	<i>Partáli villages, pargana Jalaun.</i>				
1	Itwan ...	950 0 0	Arrears Rs. 2,913-3-0 in five maháls of this pargana on 30th September 1889.	(1) Out of 359 maháls of this pargana, in 141 maháls 198 dustaks were issued for arrears aggregating Rs. 55,686. (2) Attachment and sale of movable property in 3 maháls for Rs. 1,515-9-0. After sale arrears aggregated Rs. 681-11-0. (3) Attachments under section 154, Act XIX of 1873, took place in five maháls for arrears amounting to Rs. 1,955.	The total number of partáli villages in this pargana is 213, and the total demand is Rs. 2,62,491-8-0. The demand in the 60 villages specified in previous columns was Rs. 49,089.
2	Ajetapur ...	300 0 0			
3	Udaipur ...	1,050 0 0			
4	Bhitarra ...	288 0 0			
5	Biria Khurd ...	579 0 0			
6	Partabpur ...	1,799 0 0			
7	Patana ...	390 0 0			
8	Pipri Athgaiyan ...	860 0 0			
9	Tamba ...	940 0 0			
10	Jamlapur Dhyani ...	487 0 0			
11	Jugatpur, mahál Jharan Singh ...	106 0 0			
12	Jodhapur ...	165 0 0			
13	Chaki, mahál Bhairon Singh ...	826 0 0			
14	Do., Kok Singh ...	827 0 0			
15	Do., Baldeo Brahman ...	753 0 0			
16	Do., Bhairon Brahman ...	764 0 0			
17	Chhani, Alor ...	900 0 0			
18	Hamidpur ...	256 0 0			
19	Dana ...	2,676 0 0			
20	Donapur ...	497 0 0			
21	Dhanaura, mahál Adya Prasad ...	1,851 0 0			
22	Ditto Zahir Singh ...	1,236 0 0			
23	Dhaura Khara ...	636 0 0			
24	Daini, mahál Jet Singh ...	374 0 0			
25	Rudpur, mahál Kishor Singh ...	82 0 0			
26	Ranipura ...	760 0 0			
27	Randhaura ...	484 0 0			
28	Randhirpur ...	210 0 0			
29	Rasulpur ...	268 0 0			
30	Sheikhpur Khurd ...	325 0 0			
31	Sarawan ...	5,800 0 0			
32	Sonai Parwai ...	378 0 0			
33	Sherpur, mahál Kishor Singh ...	213 0 0			
34	Salempur Kunar ...	472 0 0			
35	Sibari Chelapur ...	950 0 0			
36	Kusinara ...	3,267 0 0			
37	Karanpur ...	428 0 0			
38	Konwarpara ...	2,080 0 0			
39	Kayandi, mahál Parasram ...	99 0 0			
40	Kuthaund, mahál Gajraj Singh ...	587 0 0			

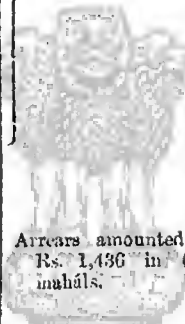
*Memorandum required by the Board regarding arrears in certain villages recently resettled—*  
(continued).

Mahals in which difficulty has been experienced in collecting new jumas.			Total arrears, pargana-wár, on the 30th September 1889.	Number of processes of each kind employed in collecting revenue during 1888-89.	Remarks.
Number.	Mahál.	Revenue of mahál.			
1	2	3	4	5	6
<i>Partáli villages, pargana Jalaun—(concluded).</i>					
		Rs. a p.			
41	Garhawan, mahál Gajan Singh	1,747 0 0			
42	Ditto, mahál Hari Singh	223 0 0			
43	Ditto, mahál Parsaram	110 0 0			
44	Ditto, mahál Girwar Singh	224 0 0			
45	Gora Kathaur ...	850 0 0			
46	Mandri ...	1,451 0 0			
47	Mankapur ...	482 0 0			
48	Mahpaulih, mahál Ramcharan Das ...	52 0 0			
49	Mahia Khus ...	460 0 0			
50	Mahia Kamalpur ...	942 0 0			
51	Madaripur ...	950 0 0			
52	Makrandpur ...	986 0 0			
53	Malpur ...	324 0 0			
54	Narayunpura ...	1,218 0 0			
55	Nabipur ...	603 0 0			
56	Nainpura ...	795 0 0			
57	Namozpur ...	715 0 0			
58	Nim Gawu ...	460 0 0			
59	Hirapur ...	496 0 0			
60	Harsinghpur ...	590 0 0			
<i>Partáli villages, pargana Kálpí.</i>					
1	Imilla Buzurg ...	1,405 0 0	Arrears amounted to Rs. 1,699 on the 30th September 1889, in 5 mahals.	(1) In 77 mahals out of a total of 188 in this pargana, 118 dastaks were served for arrears of revenue amounting to Rs. 51,917. (2) Attachment and sale of movable property took place in 12 mahals for arrears aggregating Rs. 2,204, but sale actually took place in four mahals for arrears aggregating Rs. 937. After sale Rs. 496 remained in arrears. (3) One mahál has been attached under section 154, Act XIX of 1873, for arrears aggregating Rs. 2,201-7-0.	The total number of partáli villages in this pargana is 112, and the total demand is Rs. 1,04,013. The demand in the seven villages specified in previous column was Rs. 17,331.
2	Anuta ...	2,079 0 0			
3	Bairai, mahál Kamod ...	212 0 0			
4	Piprayan ...	2,520 0 0			
5	Parasan ...	6,026 0 0			
6	Dadri ...	2,784 0 0			
7	Kurahna Alingir ...	2,305 0 0			
<i>Partáli villeges, pargana Kunch.</i>					
1	Burhaira ...	173 0 0	Revenue arrears, Nil	(1) Ninety mahals in this pargana. In 41 mahals 78 dastaks were issued for Rs. 23,202 arrears. No other process.	The total number of partáli villages in this pargana is 80, and the total demand is Rs. 62,530. The demand in the 21 vil-lages specified in previous column was Rs. 22,332.
2	Bera ...	640 0 0			
3	Bharsura ...	855 0 0			
4	Parauri ...	1,500 0 0			
5	Baroda Kalan ...	2,620 0 0			
6	Dundahan ...	269 0 0			
7	Thurat Sonjana ...	225 0 0			
8	Dabar ...	890 0 0			
9	Rukhana ...	674 0 0			
10	Kudra Buzurg ...	2,447 0 0			
11	Kudra Khurd, mahál Bhawani	134 0 0			
12	Kudra Khurd, mahál Mata Prasad ...	150 0 0			
13	Kudra Khurd, mahál Naud Lal	260 0 0			
14	Kainura ...	130 0 0			
15	Kailia ...	4,748 0 0			
16	Kaura ...	1,300 0 0			
17	Pachipura ...	356 0 0			
18	Pipri Kalan ...	1,644 0 0			
19	Khutaila ...	1,380 0 0			
20	Bharari ...	760 0 0			
21	Phulaila ...	1,208 0 0			

*Memorandum required by the Board regarding arrears in certain villages recent<sup>1</sup> resettled—*  
(continued).

Mahals in which difficulty has been experienced in collecting new jamas.			Total arrears, pargana-war, on the 30th September 1889.	Number of processes of each kind employed in collecting revenue during 1888-89.	Remarks.
Number.	Mahál.	Revenue of mahál.			
1	2	3	4	5	6
<i>Partáli villages, pargana Mudhogarkh.</i>					
		Rs. a.			
1	Bangra, mahál Baldeo	94 0 0		(1) One hundred and ninety-two maháls in this pargana. In 99 maháls 135 dastaks were issued, Rs. 51,965 being in arrears. (2) In 11 maháls 37 arrests took place for Rs. 3,813. (3) Attachment and sale of movable property took place in 38 maháls for arrears of revenue aggregating Rs. 6,660; sale actually took place in 9 maháls for actual arrears of Rs. 3,967; after sale there were arrears due of Rs. 1,323. (4) Attachment under section 154, Act XIX of 1873, in 10 maháls for arrears aggregating Rs. 6,101-8-10.	The total number of partáli villages in this pargana is 151, and the total demand is Rs. 1,30,024. The demand in the 29 villages specified in previous columns was Rs. 19,077.
2	Ditto, Ghana Ram	238 0 0			
3	Dihia	1,358 0 0			
4	Chandpura	223 0 0			
5	Rupapur	662 0 0			
6	Suraoli	420 0 0			
7	Kursara	1,700 0 0			
8	Malupura	420 0 0			
9	Septa	980 0 0			
10	Sihari	978 0 0			
11	Bhaga	1,075 0 0			
12	Gonhui	950 0 0			
13	Kunwarpara Sihari	845 0 0			
14	Kamsara	1,402 0 0			
15	Rura Sirsa	2,000 0 0			
16	Sirsa	3,124 0 0			
17	Katra	644 0 0			
18	Karila	375 0 0			
19	Atagaon	1,670 0 0			
20	Ingui	2,605 0 0			
21	Biria	370 0 0			
22	Chhiria	655 0 0			
23	Kurouti	960 0 0			
24	Sultánpura	931 0 0			
25	Kailor	1,661 0 0			
26	Kinharpara	1,197 0 0			
27	Nichori, mahál Pura Intwar	248 0 0			
28	Ditto, Baldeo Prasad and Deo Prasad	84 0 0			
29	Nawar	1,205 0 0			
<i>Kanúni villages, pargana Jalau.</i>					
1	Angauri	105 8 0	No arrears	(1) Seventy-seven maháls. In 9 maháls 8 dastaks were issued for arrears aggregating Rs. 1,090. No other process.	The total number of kanúni villages in this pargana is 39, and the total demand is Rs. 26,121-8-0. The demand in the 7 villages specified in previous column was Rs. 4,698-8-0.
2	Bhadek	2,662 0 0			
3	Hasanpur	360 0 0			
4	Nainapur	605 0 0			
5	Nizampur, mahál Gaya Prasad	88 0 0			
6	Abdullapur Kálpí	400 0 0			
7	Karmukha	483 0 0			
<i>Kanúni villages, pargana Kálpí.</i>					
1	Ingui mahál Patu	400 0 0	Arrears aggregated Rs. 4,803-7-4 in 18 maháls.	(1) One hundred and forty-six maháls. In 26 maháls 26 dastaks were issued for arrears of Rs. 1,631. (2) Attachment and sale of movable property took place in 15 maháls for arrears of Rs. 15,180. Sale took place in all these maháls. After sale Rs. 4,117 remained in arrears. No other process.	The total number of kanúni villages in this pargana is 73, and the total demand is Rs. 66,241. The demand in the 25 villages specified in previous column was Rs. 20,339.
2	Ditto, mahál Mihin Lal	390 0 0			
3	Babina mahál Basant	1,189 0 0			
4	Ditto, mahál Bralunian	590 0 0			
5	Ditto, mahál Parasram	1,029 0 0			
6	Ditto, mahál Dharin	1,354 0 0			
7	Ditto, mahál Gajpat	1,087 0 0			
8	Ditto, mahál Mathur	344 0 0			
9	Ditto, mahál Kel	870 0 0			
10	Binaura	2,260 0 0			
11	Chhuok	2,581 0 0			
12	Sonehta	836 0 0			
13	Kunda Karahi, upland	1,010 0 0			
14	Ditto mahál alluvial	260 0 0			
15	Margayan, mahál Anantuan	319 0 0			
16	Ditto, mahál Bansi	1,256 0 0			
17	Ditto, mahál Bhawani Din	1,163 0 0			
18	Ditto, mahál Tulshi	390 0 0			
19	Ditto, mahál Ratan	269 0 0			
20	Ditto, mahál Kashi	229 0 0			
21	Ditto, mahál Khuman	470 0 0			
22	Ditto, mahál Ghana	657 0 0			
23	Ditto, mahál Mausukh	799 0 0			
24	Ditto, mahál Mirai	90 0 0			
25	Ditto, mahál Ram Kishan	499 0 0			

*Memorandum required by the Board regarding arrears in certain villages recently resold—  
(concluded).*

Mahals in which difficulty has been experienced in collecting new jamas.			Total arrears, pargana-wár, on the 30th September 1889.	Number of processes of each kind employed in collecting revenue during 1888-89.	Remarks.
Number.	Mahál.	Revenue of mahál.			
1	2	3	4	5	6
	<i>Kanúni villages, pargana Kunch.</i>	Rs. a. p.			
1	Ata ...	1,595 0 0		(1) One hundred and eighty kanúni maháls in this pargana. In 45 maháls 73 dastaks were served for arrears, aggregating Rs. 46,443. (2) Attachment under section 154, Act XIX of 1873, took place in one mahál for arrears amounting to Rs. 1,042-10-10.	The total number of kanúni villages in this pargana is 82, and the total demand is Rs. 1,70,889-4-0. The demand in the 25 villages specified in previous column was Rs. 42,937-4-0.
2	Anda, mahál Ram Prasad ...	2,988 0 0			
3	Ditto, mahál Hansraj ...	118 0 0			
4	Ditto, mahál Jawahir ...	80 0 0			
5	Basol ...	6,001 0 0			
6	Bhadari, mahál Jagannath ...	1,004 0 0			
7	Bhadebhara ...	1,201 0 0			
8	Pidari ...	8,475 0 0			
9	Tumra ...	980 0 0			
10	Tursumpara ...	1,085 0 0			
11	Chandni ...	2,875 0 0			
12	Darhi ...	1,761 0 0			
13	Seta ...	1,000 0 0			
14	Kunch, mahál Piru ...	1,198 4 0			
15	Ditto, mahál Munai Lal ...	452 0 0			
16	Kaithi, mahál Kalyan ...	350 0 0			
17	Ghusiya ...	2,230 0 0			
18	Lona mahál Baiju ...	2,303 0 0			
19	Nagpura mahál Ram Bakhsh ...	137 8 0			
20	Rampur Sonchta ...	1,200 8 0			
21	Arazilani ...	780 0 0			
22	Kunwarpura ...	911 0 0			
23	Mohamda ...	715 0 0			
24	Gora Karanpur ...	1,677 0 0			
25	Taharpur ...	928 0 0			
	<i>Kanúni villages, pargana Madhogarhi.</i>				
1	Dhanja ...	2,117 0 0	Arrears amounted to Rs. 1,436 in two maháls.	(1) Eighteen kanúni maháls. In 5 maháls 12 dastaks were served for arrears amounting to Rs. 8,191. (2) Attachment and sale of movable property took place in 5 maháls for arrears aggregating Rs. 1,868. In one mahál, however, sale took place for Rs. 708, of which Rs. 551 was realized. No other process.	The total number of kanúni villages in this pargana is 12, and the total demand is Rs. 21,487. The demand in the two villages specified in previous column was Rs. 2,683.
2	Khaira Bern ...	566 0 0			

N. B.—There are no kanúni villages in pargana Orái.

W. G. JACKSON,  
Deputy Commissioner.

The 21st October 1889.

# INDEX.

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2	Comprehensive description of district, its limits, physical features and economical condition.
3	Area of the two separate settlements in district.
4	Limits of tract under report.
5	Dates of acquisition.
6	Previous settlements.
7	Previous surveys.
8	Cultivated area of Major Ternan's settlement and its term.
9	The jumra which Major Ternan found and the jumra left for collection by his settlement. Extent of reduction.
10	Processes for collection of revenue.
11	Assessment of new settlement. Khalsa increase.
12	Further increase from resumed mahals. Subject explained.
13	Total increase.
14	Data of new settlement.
15	Comparison of areas of last and present settlements.
16	Figures shown against "last settlement" explained.
17	Revenue-free, barren and uncultivated areas.
18	Cultivated area, actual increase in it.
19	Old and new revenues. Increase discussed with advertence to rise in rent-rate and advance in cultivated area.
20	Comparison of new revenue with Kunch-Kālpi settlement.
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22	Inspection of villages, assessment circles, standard rent-rates, village rent-rolls and principles of assessment.
23	Soil standard rates of each circle of assessment.
24	Treatment of estates falling under rule 10(b) for fraudulent rent-rolls.
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29	Sir, its treatment in the present settlement and its bearing on father settlements.
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31	Beneficial tenures.
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35	Résumé of the various revenue figures.
36	Revised kistbandis.
37	Land and rent of tenants of past and present settlements.
38	Irrigation and the Betwa Canal.
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43	Mortgages.
44	Tenures.
45	Population.
46	Farming stock.
47	Progress and completion of the settlement.
48	Cost of settlement.
49	Proposed duration of new settlement.
50	Change of name of district.
51	Notices of subordinates.

## APPENDICES.

*Appendix I.*—Area, rent, revenue and incidence of parganas in respect of the Jalaun tract (para. 14).

*Appendix II.*—Consolidated tables of area, past settlements, cultivation, declared rental, six years' rent-rolls, and corrected and standard rent-rolls of Jalaun tract (para. 18).

*Appendix III.*—Memo. by Mr. W. P. Vonder Hörst, Executive Engineer, on the Betwa Canal (para. 38).

(*Note.*—Maps of parganas showing circles of assessment were forwarded with the assessment reports. They might be united into one general map for the Jalaun tract in Board's office).

## ACCOMPANIMENTS.

Vi lage assessment statements as follows :—

Pargana.	Number of villages.	Number of mahals.	Extra consolidated statements for mahālwar villages.	Total number of statements.
Jalaun	213	302	19	321
Oral	135	180	17	197
Kunch	80	90	9	99
Kālpi	112	186	18	204
Madhogarh	150	191	9	200
Total	690	949	72	1,021

PHILIP WHITE,

*Dy. Commissioner  
and late Settlement Officer.*

FROM

G. L. LANG, Esq., C.S.,

COMMISSIONER, JHÁNSI DIVISION,

TO

THE SECRETARY TO THE BOARD OF REVENUE,

NORTH-WESTERN PROVINCES, ALLAHABAD.

DATED JHANSI, THE 24TH JULY 1889.

SIR,

I HAVE the honor to submit the final settlement report of a portion of the Jalaun district known as Jalaun tract, together with my review thereon, written under the orders conveyed in Board's No.  $\frac{217}{1-9}$ , dated 21st March 1889: but I would point out that, as the revision of settlement was completed and the new assessments were sanctioned by the Board of Revenue and brought into effect before I took charge of the division, any criticism by me would be useless if not impertinent. I have therefore confined myself to reviewing the statistics before me.

2. For greater facility of reference I have, as far as I could, followed the order of Mr. White's paragraphs, but this was not always possible, especially in the earlier parts of my review.

3. Jalaun is the northernmost district of the Jhānsi Division of the North-Western Provinces.

Boundaries.

It lies between 25°-46" and 26°-26" north latitude and between 78°-59" and 79°-56" east longitude.

On the west the district marches with the Gwalior, Dattiah and Samphar States, the Pahuj forming the boundary for the greater part of its length.

On the north and north-east it is separated from the Etāwah and Cawnpore districts of the North-Western Provinces by the river Jumna, whilst on the south the Betwa cuts it off from Jhānsi and Hamirpur.

To the east lies the Native State of Baoni.

4. The district is a flat plain, measuring 45 miles from north to south and 50 from east to west, encircled with deep ravines running into the rivers Jumna, Betwa and Pahuj, which enclose it on every side.

Physical aspect.

Of these rivers only the Jumna is navigable.

The high lands lie along the Betwa and Pahuj, whilst the low lands occupy the centre of the district, consisting for the most part of rich "mar" soil which grows fine wheat without irrigation and almost without manure.

The ravines are covered with grass and jungle and are for the most part unculturable.

5. The climate is hot and dry and indubitably feverish, the mean temperature being 82° Fahrenheit.

Climate.

The average rainfall is 30 inches, of which about two inches fall during the winter months of December, January and February.

On this rainfall Jalaun has hitherto been almost entirely dependent for its irrigation; but of this subject more hereafter.

**Area.**

6. The total area of the district as given by Mr. White is 1,548 square miles, or 990,662 acres, of which 67 per cent. is cultivated, 11 per cent. culturable, and 22 per cent. barren.

Of the cultivated area 58 per cent. is occupied by winter crops, 42 per cent. growing wheat mixed for the most part with gram.

**Population.**

7. The population is sparse. At the census of 1881 it numbered 418,142 souls, which gives only 260 to the square mile. Of these nearly 94 per cent. are Hindus.

**Towns and villages.**

8. The number of villages entered in the census papers of 1881 was 857, or one village to every two miles, with an average population of 500 per village.

The number of maháls at the present time is 1,414.

There are only four towns with a population of over 5,000, and these give their names to the parganas of Jalaun, Orai, Kunch and Kálpi respectively. Kálpi is the most important and populous of these towns and Orai the smallest; but Orai is central and is the administrative headquarters of the district.

**Trade and commerce.**

9. Jalaun is a purely agricultural district and its trade consists of cotton and grain. The only manufacture of importance is coarse cotton cloth, which is coloured with the red dye of the country known as "al" (*Morinda citrifolia*), which is largely grown throughout the division.

The only mart of importance is Kálpi on the Jumna, but now that the Indian Midland Railway has been opened right through from Cawnpore to Itársi, connecting the district with Northern India on the one side and with Central India and Bombay junction on the other, the conditions will be materially altered.

The road communications are fairly good. The Cawnpore and Saugor road traverses the district, and a second metalled road connects Orai with Phaphund in the Etáwáh district.

**History.**

10. Without going back to more remote times, it is sufficient to state that the Jalaun district forms part of the country held in the time of the Emperor Sháhjahán by Chhatar Sal, son of Champat Rai, a freebooter, famous in Bundelkhand annals, who ruled from the Jumna to the Narbada and collected a revenue of over a million sterling. When attacked by the Imperial forces in 1732, Chhatar Sal called to his aid the first Peshwa, Baji Rao, and, in return for the good services rendered by him, adopted him as a son, and on his death left him this portion of his dominion.

The last Marhatta chieftain who held Jalaun was Gobind Rao, and to his mismanagement was due the interference of the British Government, who took over the administration in 1839. In 1844, on the death of Gobind Rao without issue, the territory lapsed to Government.

The territory then ceded consisted of the parganas of Jalaun, Kunár, Orai and Ata. Pargana Madhogarh was assigned by Scindiah in 1843-44 for the maintenance of the Gwalior Contingent and was finally ceded in 1861.

Similarly pargana Duboh was originally assigned in 1843, and finally lapsed to the British Government with the Jhánsi State in 1854.

The old regulation parganas of Kálpi and Kunch became British territory at a much earlier period; as far back as 1805-6: but were formerly part of the Hannírpar district, and were only transferred to Jalaun in 1853 A.D.

It was not until shortly before the Mutiny of 1857 that the present boundaries of the district were finally determined.

**Parganas comprising the present district.**

11. The present district of Jalaun comprises the following parganas, which are coterminous with the tahsíl divisions:—

Orai.		Madhogarh.
Jalaun.		Kunch.
	Kálpi.	

The old parganas of *Ata*, *Duboh* and *Kunár* have disappeared, having been absorbed in the present parganas of *Kálpi*, *Kunch* and *Jalaun*. The district is non-regulation and has been proclaimed under the Scheduled Districts Act, XIV of 1874. When the *tahsildárs* are relieved of civil work, one *tahsil* might easily be abolished.

12. Since the territories that form the present district of *Jalaun* came under British rule there have been five settlements before that now under report, the first in 1840 and the last in 1863.

Earlier settlements.

The four earlier settlements were made by Political Officers before the Mutiny on the old proportion of two-thirds assets, but the fifth settlement made after the Mutiny of 1857 by Major Ternan, then Deputy Commissioner of *Jalaun*, was at half assets.

The dates and revenue of the earlier settlements is below given :—

				Rs.	
1st 1840	...	...	...	4,13,830	} by Captain Doolan.
2nd 1841	...	...	...	5,77,176	
3rd 1846	...	...	...	6,08,428	by Mr. Ross.
4th 1851	...	...	...	6,60,886	by Major Erskine.
5th 1863	...	...	...	6,19,979	by Major Ternan.

As the old regulation portions of the *Kunch* and *Kálpi* parganas received from *Hamirpur* had a separate revenue of their own, their *jamas* are excluded from the above figures.

13. The fifth, or Major Ternan's settlement, which took effect from July 1863, was sanctioned for a period of 20 years only, but lasted until 1885-86.

Major Ternan's settlement.

The Government demand under that settlement as originally sanctioned was Rs. 5,31,143, but that was not the figure at which Mr. White found it when he commenced settlement operations.

Owing to the resumption of revenue-free holdings and revision of assessment in certain villages, it had risen to Rs. 6,28,474, and this sum Mr. White tells us was collected with ease.

14. Mr. White's present settlement is the sixth since annexation.

Mr. White's settlement.

The whole district has not come under revision, but the following portions only.

*Pargana Orai*.—The whole.

*Pargana Jalaun*.—All but a strip along the *Jumna*.

*Pargana Madhogarkh*.—Two-thirds.

*Pargana Kunch*.—One-third.

*Pargana Kálpi*.—Two-thirds.

The area of this tract is 7,26,177 acres (or 1,135 square miles), which constitute nearly three-fourths of the district, the total district area being 990,662 acres.

15. The remaining part of the district which did not come under revision of settlement consists of the old regulation portions of the *Kunch* and *Kálpi* parganas and the *Jágirs* of *Jagammanpur*, *Rampura* and *Gopalpura*.

Portion of the district that did not come under revision of settlement.

16. The *Kunch* and *Kálpi* parganas, in area 214,288 acres, originally belonged to *Hamirpur*, and were settled by Sir William (then Mr.) Muirfin 1840-41 A. D., for a term of 30 years.

Old *Kunch* and *Kálpi* parganas.

They therefore did not come under Major Ternan's settlement in 1863, but were subsequently resettled by Mr. White in 1873 (when the 30 years' period expired) for a further term of 30 years, which will expire in 1903 A. D.

17. The *Rampura* and *Gopalpura* estates were held by *Kuchwaha* chieftains as *jágirs* under native rule, and these were confirmed by the British Government. They pay no revenue. Their rent-roll was estimated some years ago at Rs. 30,000 for *Rampura* and Rs. 12,634 for *Gopalpura*.

*Rampura*, *Gopalpura* and *Jagammanpur jágirs*.



The chief of Jagammanpur is a Sengar Thakur. He pays Government a quit-rent of Rs. 4,754, besides cesses.

These three jágírs are exempt from settlement operations. Mr. White gives their area together with that of Kálpi town at 50,197 acres. Why he lumps up the area of the jágírs and Kálpi town together is not explained.

Revenue of excluded tract.

18. The revenue of these tracts excluded from Mr. White's revision of settlement, as given in the printed Kálpi Rent Rate Report, is as follows :—

						Rs.
Regulation, Kunch	...	...	...	...	...	1,93,947
Ditto, Kálpi	...	...	...	...	...	92,436
Jagammanpur Jágírf	...	...	...	...	...	4,754
				Total	...	2,91,137

This sum must be added to Mr. White's revised assessments to give the revenue of the whole district.

Meaning of the term "Jalaun tract."

19. It must be distinctly understood that in writing his report Mr. White divided the Jalaun district into two parts, *viz.*, that which did not come under revision of settlement, and that which did.

With the former, *viz.*, the old regulation Kálpi and Kunch parganas and the three jágírs above mentioned, his report has nothing to do.

The latter, being the residue of the district, Mr. White calls "the Jalaun tract," and it is with that tract that he had to do as Settlement Officer, and to which all his figures relate

Survey.

20. Under orders conveyed in G. O. No.  $\frac{1495}{1-591}$ , dated 15th December 1884, no new survey was made for Mr. White's settlement; only 17 villages, known as the Duboh villages, received in exchange from Gwalior, and a few other villages, of which the maps were hopelessly bad, were resurveyed by amíns with the aid of patwáris.

In all other cases the existent maps were brought up to date by the regular staff.

Record-of-rights.

21. Similarly under the G. O. above quoted no fresh record-of-rights was made, except for the 17 Duboh villages.

Enhancement of revenue under Mr. White's settlement.

22. As already stated in paragraph 13, Mr. White on commencing settlement operations found the revenue of the Jalaun tract at Rs. 6,28,474. He raised it to Rs. 7,40,338, or by 1,11,864 rupees, an increase of nearly 18 per cent. on the revenue-paying area of the old settlement.

This is what Mr. White calls his "effective khálsa revenue."

Assessment of revenue-free plots.

In addition to the old khálsa area, Mr. White resumed and assessed a large number of revenue-free plots which had been released for the term of the old settlement, and this added Rs. 13,891 to the revenue.

Mr. White's total revised revenue of Jalaun tract.

23. Thus the total revenue of the "Jalaun tract" under Mr. White's settlement was Rs. 7,54,229, being a net gain of Rs. 1,25,755, or 20 per cent., partly due to revision of settlements, partly to resumption of muáfis, and partly (as explained in Mr. White's 9th paragraph) to the correction of a faulty system of calculating cesses under Major Ternan's settlement, whereby the revenue suffered loss.

Causes of increased revenue.

24. To what was this increase due? To a larger assessable area, or to higher prevailing rates? The figures given in Mr. White's 15th paragraph show that since last settlement—

- (i) the culturable area has increased by 20 per cent.;
- (ii) there has been little appreciable increase in cultivated area;
- (iii) the revenue-free area has fallen to less than half.

25. The increase in culturable area is attributed by Mr. White partly to land thrown out of cultivation in order to deceive the Settlement Officer, and partly to a change in system of classification, apparently out of deference to an opinion expressed by Sir W. Muir when Lieutenant-Governor of these Provinces.

Nominal increase in culturable area.

Mr. White writes : " This opinion, which had a special importance coming from the source it did, was borne in mind, and all land under the head barren that could still with any fairness be deemed culturable was transferred to it." In other words, a good deal of barren land is now shown as culturable, but the character of the land has not changed since Major Ternan classified it in 1833 A. D. As a matter of fact, the district is a highly cultivated one, and there is little culturable land to fall back upon : and this materially affects the question of the capacity of the zamíndárs to pay the enhanced revenue.

26. As regards the cultivated area, Mr. White writes at some length to show that the figures given in his 15th paragraph are inaccurate and valueless for purposes of comparison : partly because the cultivated area of last settlement is overstated in that paragraph, and partly because much land was purposely thrown out of cultivation between the years 1289 and 1291-92 fasli in anticipation of the new settlement. He expresses his opinion that the increase in cultivation since last settlement is not less than 9 per cent. In this calculation, however, Mr. White includes over 8,000 acres of resumed maáfi land, and appears to have confused increase in cultivated area with increase in assessable area.

Real increase in cultivated area.

27. Next as to rent-rates, Mr. White found that the average tenant-rate which at Major Ternan's settlement was Rs. 3-1-7 had risen to Rs. 3-8-8, or by 14 per cent. ; but he does not consider that this represents the whole rise, which he calculates at not less than 3 annas in the rupee, or nearly 19 per cent.

Rise in rent-rates.

For his reasons I refer you to paragraph 19 of his report.

28. To support his argument Mr. White gives statistics to show that the rent-rates he had adopted for his assessments are actually lower than those in force in similar land in the old regulation parts of the Kunch-Kálpi parganas which have not come under resettlement.

Mr. White's rent-rates compared with those of Kálpi-Kunch tract.

29. He then goes on to explain how he calculated the assets of the district for purposes of assessment, and gives figures to show that the revised jumas barely exceed 47 per cent. of the assessable area, and finally expresses his opinion that " on the most moderate computation of the value of the increase of cultivation and rent-rates, the enhancement of the revenue has been light, although the limit favored by the Government of India has been passed."

Mr. White's own opinion of the lightness of his assessments.

30. As a final proof of the moderation of his assessments, Mr. White points out that out of 74 cases in which the Board of Revenue interfered, they increased the jumas in 72 cases, and in the two remaining cases reduced them by 3½ rupees only.

31. The result of Mr. White's resettlement on the district generally was that—

General result of reassessment on old jumas.

In 733 out of 949 maháls subject to revision the revenue was increased.

In 153 maháls the old revenue was retained.

In 63 maháls it was reduced.

32. Mr. White's assessments were submitted in due course to the Board of Revenue, and after revision were sanctioned by the Board of Revenue on the following dates :—

Date of sanction by Board of Revenue.

Pargana Jalaun	...	...	...	...	23rd May 1887.
" Orai	...	...	...	...	2nd June 1887.
" Kunch	...	...	...	...	12th January 1888.
" Kálpi	...	...	...	...	12th January 1888.
" Madhogarh	...	...	...	...	12th January 1888.

Dates from which new  
settlement came into  
force.

33. The dates from which the revised settlement came into force and the new revenue has been collected are below given :—

Pargana Jalaun	...	...	...	...	November 1886.
" Orui	...	...	...	...	November 1886.
" Kunch	...	...	...	...	November 1887.
" Kálpi	...	...	...	...	November 1887.
" Madhogarh	...	...	...	...	November 1887.

34. The total Government demand of the Jalaun tract as formally sanctioned was—

					Rs.
Pargana Jalaun	...	...	...	...	2,36,087
" Orui	...	...	...	...	2,18,186
" Kunch	...	...	...	...	66,103
" Kálpi	...	...	...	...	1,05,873
" Madhogarh	...	...	...	...	1,27,980
Total	...	...	...	...	7,54,229

35. To ascertain the revenue of the entire district the jamas of the Kunch-Kálpi tract and the Jagammanpur Jágir given in paragraph 18 of the report must be added thus—

					Rs.
Jalaun tract	...	...	...	...	7,54,229
Old regulation Kunch pargana	...	...	...	...	1,93,947
Ditto, Kálpi	...	...	...	...	92,436
Jagammanpur Jágir	...	...	...	...	4,754
Total revenue of district	...	...	...	...	10,45,366

36. The above figures are taken from Mr. White's assessment report of pargana Kálpi and final settlement report, except the total, which is nowhere given.

As the jamas are in some cases progressive the full demand is not yet collected.

The total demand for the current year as stated by the Jalaun office is Rs. 10,29,870 (including revenue on and off the roll).

37. It may be asked how the new settlement is working. I took over charge of the division towards the close of the cold weather and have not yet had the opportunity of marching over the Jalaun district, but I understand that the new assessments are collected with difficulty and that considerable arrears of revenue have already accrued.

This Mr. Jackson attributes entirely to a succession of three bad years following directly on the new settlement. He is of opinion that the new assessments are not in themselves too heavy, but there is no doubt that the enhancement is strongly resented by the landholders and the successive bad seasons have given colour to their complaints.

A native gentleman of great experience both as a landholder and an official told me that he thought that the new settlement pressed very heavily on the district; that although the rent-rates on which the assessments were framed were fair enough in themselves with regard to the quality of the soil, they were higher than had been hitherto paid; that the tenants never had paid and were not now prepared to pay a full rent; and that, as the population was sparse and tenants hard to get, the landlords were at their mercy and could not enhance existing rents with impunity or get new tenants if they lost the old.

He had nothing to complain of in the settlement of his own villages, but spoke of what he saw and heard around him.

There is probably truth in what he says: anyhow it is singularly unfortunate that a series of bad years should have followed so close on the new settlement to accentuate the difficulties of an enhanced demand.

Only time will tell, but I much fear that the Deputy Commissioner of Jalann will for some years to come have no easy task to get in his revenue.

38. The next subject treated of is the revenue lost to Government on lands held revenue-free or as beneficial tenures.

The following figures are taken from paragraphs 31 to 34 of the report :—

					Rs.
Postponed share of revenue on beneficial tenures	...	...	...	...	15,520
Ditto for half jama plots	...	...	...	...	8,291
Estimated jama of revenue-free plots	...	...	...	...	8,938

The aggregate of these items represents the sum that Government foregoes annually. In some cases the revenue will be eventually recovered, in others (as in the case of perpetual *maifis*) the land will remain revenue free for ever.

Paragraphs 33 and 34 deal with revenue-free lands in their relation to cesses, but call for no special notice.

39. Whilst revising the revenue Mr. White also revised the *kistbandis*. These have been sanctioned and brought into force with the new assessments. Kistbandis.

40. Sayer or natural products were not assessed, the reason given by Mr. White being that even without assessing sayer he found it difficult to keep the assessment down to the prescribed limit. Sayer.

41. Progressive settlements were sanctioned by the Board (who somewhat modified Mr. White's list) in the case of 200 estates. Progressive settlement.

These progressive *jamas* run over eight years before they reach the full demand.

42. No exemptions were made on account of improvements effected by the landlords at their own cost. Exemption for improvements.

43. Paragraph 29 of the report deals with *sir* lands which are said to occupy over 21 per cent. of the cultivated area. Sir and khudkasht.

These lands were rated at Rs. 2-12-0 per acre, calculated at three-fourths of an average tenant rate under the latest settlement rules. Mr. White found the *sir* to be as a general rule of better quality than the rest of the village lands.

The rate paid by sub-tenants (who cultivate 16 per cent. of the *sir* lands) exceeds Rs. 4 per acre.

44. From the figures given in Mr. White's 37th paragraph it appears that the proportion of land held as *sir* or *khudkasht* has increased since last settlement. Increase in sir and khudkasht area.

Their combined area is now 39 per cent. of the total cultivation. This is not strange, but only the inevitable result of the privileges accorded to *sir* land both in the Revenue and Settlement Courts.

45. The area under occupancy rights has also increased from 20·8 per cent. of the cultivated area to 22·9. It may be that these rights have not actually increased, but have only been more clearly defined under the new settlement. Occupancy tenants.

46. The next subject touched on is that of irrigation, a very important one in Bundelkhand, where the cultivator trusts for the most part to the rain even for his winter crops. To show how little irrigation there has been up to date, it is sufficient to mention that of the entire Jalann tract only 12,728 acres, or less than 3 per cent. of the total cultivated area, was watered. Irrigation.

The Betwa Canal is expected to change all this. It was opened in September 1885, and Mr. White was able to write in 1888 that the results "had been satisfactory and even cheering;" that wheat was now grown in place of barley; and that sugarcane and indigo cultivation was advancing.

The canal gives nearly all its water to the Jalann district.

The area that it irrigates in Hamirpur, Jhānsi and Native States is infinitesimally small.

An interesting note by the Executive Engineer of the Betwa Canal Division is printed as Appendix III to the report.

When I was in Orai the other day I asked Mr. Vonder Horst for the latest details of canal irrigation. They are given in tabular form in the annexed statement.

It will be seen that in the Jalaun district alone the area under canal irrigation is now 30,916 acres, paying a revenue of Rs. 74,706.

This represents over 6 per cent. of the cultivated area of the district, and is distinct from that watered from wells and tanks or other sources.

*Betwa Canal.*

District.	Irrigated area, 1888-89.			Double-cropped area.	Net area.	Number of villages irrigated.	Number of outlets in use.	Revenue assessed, 1888-89.		
	Kharif.	Rabi.	Total.					Kharif.	Rabi.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	No.	No.	Rs.	Rs.	Rs.
Jhānsi ...	...	17	17	...	17	2	2	...	37	37
Jalaun ...	3,478	28,072	31,550	634	30,916	408	1,378	18,371	56,335	74,706
Hamirpur ...	...	876	876	...	876	15	71	...	717	717
Native States,	...	166	166	...	166	15	Direct.	...	201	201
Total ...	3,478	29,131	32,609	634	31,973	440	1,451	18,371	57,290	75,661

47. Paragraph 39 of the report deals with crops.

The area under rabi is 279,744 acres against 178,229 under kharif. Of the rabi no less than 188,120 acres are under wheat, a wonderful fact, looking to the scanty sources of irrigation, and due entirely to the porous black soil that holds moisture so long.

Wheat is generally grown with gram and seldom with anything else. The gram is remarkably fine. Peas, strange to say, are not grown at all in the district.

The principal kharif crops are juár, bájra and cotton, cotton occupying 35,077 acres. Of other valuable crops indigo is grown in 167 acres, sugarcane in 694, rice in 972 and poppy in 1,060.

48. In paragraph 22 of his report Mr. White explains his system of assessment. Briefly it was as follows:—

He classified all the villages in each pargana and divided them into four or five standard circles of assessment.

He then divided each village into four classes of soil, viz.:—

“Már,” a friable black soil; “Kábar,” a stiffer black soil; “Parwa,” or mixed clay and sand, and “Rákar,” a poor refuse soil; and proceeded to deduce standard rates for each of these classes of soil for each circle of assessment in the pargana.

These rates he applied to correct the rent-rolls of all villages in the circle to which they applied.

Having thus obtained his corrected rent-rolls, he made deductions (in addition to the prescribed 25 per cent. on *sír* lands) varying from 6½ per cent. in superior villages to 12½ per cent. in inferior, applying this drawback sometimes to the whole tenancy rental, and sometimes (when the rents of occupancy tenants were suspiciously low) only to the area held by tenants-at-will. In some cases where the entire rent-roll

was obviously untrustworthy no abatement was allowed and a full half of the corrected rent-roll was taken for the jama.

49. Section 23 of the report gives for all parganas the soil standard rates per acre for each class or circle of assessment.

50. Mr. White arrived at the conclusion that *nowhere* did the village papers “absolutely and fully expose” the actual rent-rolls.

51. The table of price current given in paragraph 40 does not show any remarkable changes during the last five years. Price current.

The effect of the railway is to equalize prices, and seeing that Jalaun prices have been anything but low for the last five years, they are likely to fall rather than rise in consequence of improved communication. Prices, it is true, range higher in Jhānsi with its cantonment and railway town, but, on the other hand, they are far lower in the Doab, and the Doab prices may eventually influence those of Bundelkhand.

52. The area affected by transfer during the last twenty years is very large, ranging from 10 per cent. in Orai to over 24 per cent. in Kālpi. Transfers.

This is exclusive of mortgages. The prices paid were very small even in Kunch, where 13½ years’ purchase was reached.

In Kālpi, where far the largest area changed hands, the average selling price was seven years’ purchase.

For the whole district the average was less than 11 years’ purchase, and the price per acre 10 rupees.

Mr. White calls this “a satisfactory selling price,” but I cannot follow his argument: nor can I understand why, if Major Ternan’s jamas were so easily paid, so much land changed hands under his settlement.

Doubtless there has not been much demand for land in Bundelkhand hitherto; that the proceedings in Jhānsi under Act XVI of 1882 showed: but whatever the reason may be the facts remain, *i.e.*, that under Major Ternan’s settlement much land changed hands and the prices paid were low.

53. From the figures given in Mr. White’s 42nd paragraph regarding transfer of land, I have prepared the following statement showing the largest gainers and losers:—

Name of caste.	Acreage received by transfer.	Acreage lost by transfer.	Net gain of acreage.	Net loss of acreage.
Brāhmans ... ..	37,371	24,163	13,208	...
Marwāris ... ..	13,638	3,440	10,198	...
Baniās ... ..	6,721	1,478	5,243	...
Goshaiās ... ..	1,407	276	1,131	...
Musalmaṇās ... ..	9,836	8,649	1,187	...
Thākurs ... ..	20,142	34,046	...	13,904
Lodhis ... ..	2,064	8,019	...	5,955
Gujars ... ..	3,808	8,168	...	4,360
Kurmis ... ..	2,716	6,539	...	3,823
Ahīrs ... ..	2,261	5,002	...	2,741

It will be seen that the Brāhmans were the greatest gainers and the Thākurs the greatest losers. They are the two principal landowning tribes in the district.

The Jalaun Rāja was himself a Dakhani Pandit, and presumably many of the landowning Brāhmans are of the same caste.

The Thākurs are mostly Sengars and Kachwahās; the Bundelas hold hardly any land in the district.

Next to Brāhmans and Thākurs, Kurmis and Gujars own most landed property, but they have both lost land during the period of the last settlement.

After the Bráhmans, the largest gainers are the Marwáris and the Banias, the money-lenders of these parts.

It is noticeable that the principal losers have been the agricultural classes, *viz.*, Thákurs, Lodhis, Ahirs, Kurmis and Gujars: probably from want of capital, their land having fallen into the hands of capitalists.

This result is not satisfactory: for the money-lender in this country seldom makes a good landlord or expends his money on the improvement of the land and the condition of the tenantry.

54. The table of tenures shows that the largest number of maháls are imperfect pattidári (546 with a revenue of Rs. 5,34,352) and zamindári (356, paying Rs. 1,90,582 to Government).

There are only 13 Bhyachara estates in all.

55. Paragraph 45 gives statistics of population (for the Jalaun tract only). More than half the people are agriculturists.

56. Paragraph 46 gives statistics of farming stock.

57. The Jalaun settlement was commenced under G. O. No. <sup>1851</sup><sub>1-1001</sub>, dated 24th December 1884, and in April 1885 Mr. White was appointed Settlement Officer, but does not appear to have taken up his duties until September 1885. He concluded his assessments in August 1887, and ceased to be a Settlement Officer on 30th September of that year, but the Settlement office was not finally closed until 31st March 1888.

58. The total cost of revision of settlement was Rs. 1,59,434 spread over four years. It fell at Rs. 138-13-9 per square mile.

59. The duration of the settlement is not yet fixed. Mr. White proposes that it should run for the whole of the Jalaun tract to 30th June 1907, and that the existing settlement of the Regulation Kunch-Kálpí tract, which expires on the 30th June 1903, should be extended to the same date. The proposal appears to me a good one.

60. I entirely agree with Mr. White that the name of the district should be changed from Jalaun to Orai. Jalaun is under the present conditions of the district a misnomer, and the name has little historical value to justify its retention.

Orai, on the other hand, is on the Midland Railway and increasing in importance, and finally, to avoid postal complications, the district should bear the name of its headquarters, as every other district does in the province.

61. Of the character of the work done by Mr. White and his subordinates, for reasons before stated, I can offer no opinion: it is doubtless well known to the Board of Revenue.

I have the honor to be,

SIR,

Your most obedient servant,

G. L. LANG,

*Offg. Commissioner.*

FROM

PHILIP WHITE, Esq.,

DEPUTY COMMISSIONER AND LATE SETTLEMENT OFFICER,

JALAUN DISTRICT,

TO

THE COMMISSIONER, JHANSI DIVISION.

DATED ORAI, THE 5TH NOVEMBER, 1888.

SIR,

I HAVE the honor to submit the final report of the portion of the Jalaun district which has just undergone revision of settlement. But first it will be convenient to preface the subject with a short general description of the whole district, its boundaries, its physical features and its economical condition.

Introductory.

2. The district of Jalaun has an area of 1,518 square miles, and lies between latitude  $25^{\circ}$ — $27^{\circ}$  and longitude  $79^{\circ}$ — $80^{\circ}$ . It is of a roughly triangular shape, with the western boundary for the base. The upper or northern boundary slopes down suddenly eastwards, and the lower or southern one trends upwards in the same direction but not so sharply. As a consequence the due east boundary narrows to a width of some 18 miles only, and is most irregular as the Bauni territory makes deep indentations in it. Similarly on the west boundary a substantial strip of Dattiah land is thrust wedgelike between parganas Madhogarh and Kunch. The borders in all other directions are uninterrupted and fairly regular. Jalaun is bordered on the north by the Etawah district, on the north-east by the Cawnpore district, on the south and south-east by the Jhansi and Hamirpur districts, on the south-west by the Samthar Native State, and on the broad west by Gwalior territory. The upper, lower and western sides possess natural boundaries in the rivers Jumna, Betwa and Pahuj respectively. Only on the narrow east and south-west boundaries are there no natural divisions. A large village, Sami of Samthar, by some accident lies in the midst of our territory in pargana Kunch, and fortunately for the ends of good administration it is the sole instance in this district of a foreign village thus invading our lands. The district is marked by no hills or lakes like its neighbour Jhansi, but is an extensive flat plain encompassed on its four exterior boundaries by an intricate reticulation of deep ravines of the Jumna, the Betwa and the Pahuj. This impassable ravine girdle is only broken in two places, on the south of Kunch contiguous with Samthar and on the east of Ata conterminous with Bauni territory. The inner lands are also excoriated in places by minor ravines along the lines of drainage. Ravines altogether cover about 200,000 acres, forming no less than 20 per cent. of the whole area of the district. A large share of them is totally barren, while the rest grows scrub wood and grass of sorts, contributing, however, nothing appreciable to the assessable assets of estates, speaking generally. Kalpi has its surface more scored and deteriorated by ravines than any other pargana.

Comprehensive description of district, its limits, physical features and economical condition.

It is usual to assume the arterial drainage system of a duab to consist of a backbone or watershed somewhere between the two rivers, whence the drainage disseminates and flows into them on either side. The surface formation of the Jalaun duab is widely different. The highlands border upon the khadir valleys of the Betwa and Pahuj rivers, while the lowlands occupy the central part, draining them-



selves principally by two separate channels which unite as they approach the Jumna, falling into it about six miles above the town of Kálpi. This central part makes a basin for the formation of those great *már* and *márkhila-kabar* beds which are so valuable on account of their remarkable fertility, yielding year after year rich wheat crops (sown intermixed with gram as the custom is) without irrigation and often without manure either. These *már* beds present a notable sight to the traveller in the *robi* season. From the very edge of the high road he sees stretching out for miles, as far as the eye can reach on either hand, a perfect prairie of wheat, a vast interminable sheet of beautiful green or yellow as the month may be January or March. Nothing abruptly interrupts the view. There are no *merhs* or raised field boundaries, high or low; a narrow untilled strip suffices for both pathway and border. Groves out in the open in these *már* tracts do not exist. Other crops nowhere intrude. The villages, composed of brick houses with tiled roofs, lie far apart, and standing elevated above the plain on tumuli apparently of artificial construction (to avoid swamping in the rains) with the frowning ruins of a mediæval *garhi* or fort as the most salient feature in the landscape, and belted with sylvan woods, they look, in the enchantment lent by distance to the view, singularly picturesque in their rich expansive setting of emerald or gold. The picture, it must be confessed, is a sadly different one in the hot season when the crops are off the ground. Then the scene is dismally monotonous with nothing attractive about it. Roughly the southern half of the district is black soil and the northern half white, grey or brown soil, moaning by the former *már* and *kabar* and by the latter *parwa* and *rakar*. The southern is of course the richer of the two tracts, and also much the larger. It comprehends the whole of parganas Orai and Kunch and the lower portions of parganas Kálpi, Jalaun and Madhogarh. I pass my imaginary dividing line east and west through the large villages of Babina, Ata, Ataria, Ugaon, Jagneo, Chaki and Bangra. The Jumna is navigable; not so the Betwa and Pahuj, which have rocky beds and are at very low water in the dry months. The population is sparse, being about 260 per square mile, and on the average there is one village to about two square miles. The average population per village is nearly 500. There are four towns with a population rising above 5,000, viz., Orai, Jalaun, Kunch and Kálpi. Hindus form nearly 94 per cent. of the total population, and their prevailing castes are Brahmans, Rajputs, Chamárs, Kachhis, Koris and Kurmis. Agriculturists are 46 per cent. of the total census, and the average number of persons dependent on each male adult agriculturist is nearly 3, while the average number of acres he cultivates is nearly 10. Proprietors of

* Jalaun Tract	...	21,711
Regulation pargana Kunch...	1,030	
Regulation pargana Kálpi ...	1,439	
		<hr/> 24,180

land number \*24,180, with an average ownership of 30·8 culturable acres, paying a revenue of Rs. 43·5. One thousand and fifty-three square miles are cultivated, 158 are cultivable, and 342 are barren. The local names for the two harvests are

*Sihári* (kharíf) and *Unhári* (rabi). The paying harvest is of course the rabi, but the kharíf has a more intimate connection with the agriculturist's daily life. Its cost of cultivation is small, and if things are ordinarily favorable it gives the cultivator enough of every kind of crop it produces to answer all the home needs of his family for a year. The poor cultivator sells none of his kharíf, only the well-to-do one does. The ordinary cultivator regards the kharíf with a favorable eye from another standpoint: it has the rabi behind it. If it fails the loss is not absolutely irreparable. A kharíf failure is obvious before the rainy season has quite departed. Every likely field is at once ploughed up and rapidly, if somewhat roughly, prepared for the ensuing rabi, when a large accession of acreage to the gram crop results. On the other hand the rabi sowings are expensive, and if any calamity supervenes it goes hard with the cultivator to replace the cost of the seed, let alone the rent. The rabi is also costly in the matters of weeding, protecting, cutting, threshing and winnowing; but if no special damage have occurred the produce is heavy and valuable. Rabi is the preponderating harvest, occupying about 58

per cent. of the total cultivated area. Parganas Orai and Kunch contribute mainly to this result, as the black soil which is not well adapted to the kharif, prevails in them. Where the Jalaun cultivator has a choice he prefers to devote about half his holding to the kharif crops. Wheat absorbs 42 per cent. of the entire cultivation. The communications of the district are now nearly perfect. It is traversed by the Cawnpore, Jhansi and Saugor road, another first class road connects Orai *via* Jalaun with the East Indian Railway at the Phaphund station in the Etawah district, and a third links it permanently with the important town of Kunch. Every tahsili except Madhogarh is connected with the district head-quarters by a metalled road; the district board is now trying hard to have this omission also supplied. The chief commerce is in food-grains and cotton. Hitherto the flow of traffic has been northward to Cawnpore; it is highly probable that the Indian Midland Railway, which was opened a few months ago and intersects the district, will now stem and turn the tide of traffic in the diametrically opposite direction of Bombay. The material influence on the district of two such now vitalizing agents as the railway and the Betwa Canal will be incalculable in the course of another decade or two. I now close this rapid survey of the district and proceed to the immediate business in hand.

3. In acres the total area of the Jalaun district is 990,662. Of this the regulation Kunch and Kalpi tract consists of 214,288 acres, and the three chiefships of Rampura, Jagamanpur and Gopalpura with the Kalpi town amount to 50,197 acres. These have stood out of the present re-settlement. The existing settlement of the former area runs to A. D. 1903-4, and the latter area is exempt from any revenue settlement whatever. The residue amounts to 726,177 acres, or 1,135 square miles, and may be briefly called the Jalaun tract.

Area of the two separate settlements in district.

4. There are five parganas in the district to which the number of tahsils corresponds, *viz.*, Orai, Jalaun, Madhogarh, Kunch and Kalpi. This revision has embraced the whole of pargana Orai, all pargana Jalaun except the narrow northern border constituting little more than the Jumna bank, two-thirds of pargana Madhogarh being its broad eastern section, one-third of pargana Kunch abutting on the river Pahuj with a small piece at its south-eastern extremity, and rather more than two-thirds of pargana Kalpi located in its interior and southern portions.

Limits of tract under report.

5. This territory came into British possession only about 44 years ago. That part which is described as being in parganas Madhogarh and Kunch was given over in 1843 by Sindia in payment for the Gwalior Contingent, and was absolutely ceded by the treaty of December, 1860. The rest was first placed under the management of a British officer in 1839 owing to financial difficulties and dissensions in the family of the Mahratta chief of Jalaun, and it lapsed permanently in 1844 on the death of Gobind Rao, whose sister, Lachmi Bai, widow of the late ruler, Bala Rao Gobind, had been allowed to adopt him.

Dates of acquisition.

6. The present is the sixth settlement. The four earlier settlements were essentially rough and summary, and were carried out by the Political Officer in charge of the district. Under fixed assessments and the security of our rule, cultivation rapidly increased and the revenue as quickly advanced with it. The first settlement in 1840 for one year's term only amounted to Rs. 4,13,839; the second, which was for five years, from 1841 to 1845, rose to Rs. 5,77,176; the third, from 1846 to 1850, to Rs. 6,08,428; and the fourth, which was made in 1851 for another quinquennium by Major Erskine (the late Earl of Kellie), to Rs. 6,60,886. This settlement, which like its two predecessors was intended to be only for five years, was prolonged till 1863 by the catastrophe of the Mutiny of 1857 and the delay which afterwards occurred in carrying out the regular settlement. But meanwhile it had been found to press with severity in some quarters and summary reductions were made amounting to Rs. 42,016. Thus the Government demand stood at Rs. 6,18,870 when the regular settlement came to be introduced. The four summary settlements professed to take

Previous settlements.

two-thirds of the assets as revenue; the fifth, being the first regular settlement, took half assets only, which is the ruling proportion to this day.

#### Previous surveys.

7. We have three past records of the cultivated area. In 1841-43 the scientific survey was effected by Lieutenants Abbott and Burgess. In 1853-56 Major Erskine carried out the plano-table survey. As Jalaun has the credit of being the first district in the North-Western Provinces in which the new system of settlement on the primary basis of village rent-rolls has been, according to the Senior Member's verdict, successfully put into practice, so it was the first district in which the Panjāb plan of khasra measurement by village patwāris was attempted. Major Ternan's settlement, being the fifth above referred to, was grounded on this field survey; it is important to bear this fact in mind. In 1865-66 I made a *partial* or detailed test of this measurement, as *inter alia* the question of a permanent settlement had come up, which, however, was fortunately not pressed to finality. There was therefore no assessment *de novo* on this revised measurement. By the first operation the cultivated area was 3,0,415 acres, by the second 432,199 acres, and by the third 455,224 acres. In the period from 1844 to 1857, taking the years immediately after the conclusion of the first two surveys, cultivation increased 44 per cent.

#### Cultivated area of Major Ternan's settlement and its term.

8. Major Ternan's settlement proceeded mainly on the cultivated area of 432,199 acres. That area was found in 1857, when the Mutiny broke out. His assessment upon it was commenced after the restoration of order in 1859 and finished in 1861. It, however, took effect from 1st July, 1863, and was sanctioned for 20 years up to 30th June, 1883, but lasted till 1885-86.

#### Jama which Major Ternan found and jama left for collection by his settlement. Extent of reduction.

9. When Major Ternan's re-settlement began the Government demand, as already stated, stood at Rs. 6,18,870; but the amount which was really subject to his revision was Rs. 6,14,516 (*vide* paragraph 81 of my Settlement Report, No. 58, dated 30th April, 1869). He reduced it to Rs. 5,31,143, or by 13.5 per cent. But he had further a large windfall in resumed lands which paid no revenue before and now gave him Rs. 60,520, raising his effective or actually realizable assessment to Rs. 5,91,663. To this sum has to be added Rs. 4,754, the quit-rent of the Jagamanpur Jagir, which was neither surveyed nor re-assessed, and a small accidental increment of Rs. 108 in Madhogarh khas, making the total Rs. 5,96,525. The innumerable muāfi parcels that then existed in the district had been treated with some haste and confusion after the Mutiny, and their condition was therefore ordered to be re-examined and corrected. On the one hand restorations and on the other resumptious were extensively made. The net result was an increased revenue of Rs. 6,768. Further, Major Ternan's jamas were, under orders, revised in 86 cases, which gave another net increase of Rs. 17,484. Adding these figures to Rs. 5,96,525, the revenue of last settlement should have been Rs. 6,20,777, while the consolidated demand, with 10 per cent. added for cesses, the proportion in force at that time, should have been Rs. 6,82,855; whereas in fact the amount credited to revenue was Rs. 6,03,497 and to consolidated demand Rs. 6,64,727. The loss to the revenue proper was Rs. 17,280. This was owing to special orders. Major Ternan's cesses had been calculated on the old plan of a fixed rate of  $2\frac{1}{4}$  per cent. on the revenue for Road, School and Postal funds, with a variable charge for chankidars according to the number required in each village. The aggregate almost always fell more or less short of 10 per cent. of the revenue. Before the settlement was confirmed the rule of assessment was modified to taking a consolidated demand of 55 per cent. on the assets which alone was to be expressed in the engagement required from proprietors, without any separate details of cesses. The Board of Revenue directed that the rule was to be introduced in Jalaun, the aggregate demand fixed by Major Ternan being accepted as the revised demand at 55 per cent., from which the necessary credits were afterwards to be made to the several funds, namely, 50 per cent., to Revenue,  $\frac{1}{2}$  per cent. each to the Road and School funds,  $\frac{1}{8}$  per cent. to the Dāk, and  $3\frac{1}{8}$  per cent. to the Municipal fund. It is obvious that the revenue proper had to suffer in this operation, since the money required for the enhanced cesses could come out

of no other pocket. Nominal assessments on estates held revenue-free for life or in perpetuity have not been brought into this paragraph.

10. The past revenue has always been collected with ease. Among the thousands of share-holders to be dealt with a certain proportion of recalcitrants, incorrigibles and bad paymasters must always be expected. I have examined the coercive processes used for the last twelve years and find this as the average result per annum: 662 *dastaks* or writs of demand, seven or eight arrests, 30 distrainments of moveable property, five temporary attachments of a mahāl or shares thereof, one transfer to a solvent co-sharer, two annulments of settlement with direct management, no farms and no sales either of mahals or shares of mahals. Matters would be still more satisfactory were it not that the office of *lambardār* is losing much of its old authority and consequence. A *lambardār's* post is no bed of roses in its relations with the *tahsili*. Not only in connection with the collection of the revenue but on every general or particular occasion in which the village help is needed the *lambardār* is requisitioned, and frequently has a harassing time of it. At the settlements it was recognised that he should get fees for his trouble, from the sharers of his *thok*, equivalent to five per cent. on the revenue for which he is primarily responsible. He has from goodfellowship or other laudable motives probably refrained from vigorously exacting these fees from his subordinate sharers year by year. At length his patience is worn out in regard to some particularly troublesome sharers. He does not see why he should not make these men pay his fees, and brings a suit. In the district he would always win, but the more academic appellate court looms beyond. It naturally seizes on the breach in the custom of levying fees, though made by the *lambardār's* own forbearance; or it puts him to the proof of categorically showing that he has actually earned his fees. The matter ends by the *lambardār* getting nothing but loss of costs. The utility of the office is coming to be questioned, when neither pleasure nor profit seems to attach to it. Weaker men thus begin to fill it; the post loses in influence; the *tahsildār* is obliged more and more to address himself directly to the individual share-holders for the collection of the revenue; and as a result coercive processes have the tendency to increase.

Processes for collection of revenue.

11. Major Tornan's effective revenue was Rs. 6,03,497. Intermediate increments from lapsing revenue-free tenures, &c., occurred to the extent of Rs. 8,495 in course of the settlement term. Add Rs. 16,482, being the old jama of the 17 Daboh villages, and the "existing revenue," or that of the last year of the late settlement which fell to me to revise, was Rs. 6,28,474. I have raised it to Rs. 7,10,338, or by Rs. 1,11,864. The increase is at the rate of 17.80 per cent, and the incidence of this new revenue on cultivation is Re. 1-9-6 per acre. But a small correction has to be noted for the present. Two villages in pargana Jalum, viz., Pajanna (4 mahals) and Kuthaunda Khurd are *muāfi* sub-settlements, their jamas Rs. 532 and Rs. 800 respectively being paid by the *zamindārs* into the *tahsili* and thence disbursed to the life *muāfidars*. Deducting then Rs. 1,332, the net increase is Rs. 1,10,532, the immediately effective new *khalsa* revenue being Rs. 7,39,006. It will not be necessary to repeat this trifling and temporary deduction from the figures of the assessment when they have to be mentioned again in the subsequent paragraphs.

Assessment of new settlement. *Khalsa* increase.

12. I have termed the above "*khalsa* revenue" to distinguish it from the further revenue accruing from a large number of *muāfi* plots, in all the parganas, which lost their revenue-free character by the termination of the settlement on 30th June, 1883, on which date their right to exemption from assessment lapsed. Sanction to commence the revision of settlement had not been received from the Government of India when His Honor the Lieutenant-Governor in G. O. No. 2266, dated 25th October, 1883, paragraph 3, ordered these resumable *muāfis* to be assessed. They were therefore taken up separately, and their assessments reported to the Commissioner in detailed pargana registers. For the moment these proceedings were of the nature of summary settlements, but were afterwards under my powers of Settlement Officer

Further increase from resumed *muāfis*. Subject explained.

duly brought into line with the sanctioned regular revision of settlement. I fully explained this in para. 15 of my first assessment report for pargana Jalaun, No.  $\frac{271}{1-103}$ , dated 29th July, 1886, which may be referred to. From this source the cultivated area of the Jalaun tract received an accession of 8,011 acres and the revenue an augmentation of Rs. 13,891. The incidence on the cultivation here is Re. 1-11-9 per acre. This is  $2\frac{1}{2}$  annas per acre more than the incidence of the new khalsa assessment and is attributable to the generally better quality of the resumed muáfi lands.

Total increase.

13. The new revenue from both sources, i.e., khalsa and resumed muáfis, is thus Rs. 7,54,229 and the aggregate increase on the revenue of the last year of last settlement is therefore Rs. 1,25,755, which is nearly at the rate of 20 per cent. ; but always let it be remembered that the supplemental increase afforded by the resumed muáfis has its own separate cultivated area, distinct from the khalsa cultivation of the Jalaun tract which alone formed the text of the correspondence with the Government of India prior to the revision of settlement.

Data of new settlement.

14. Before giving any further exposition of the new revenue in all its details, I must make a slight retrogression and set forth the area and the various rent-rolls upon which it has been based. And in doing so I will not, either here or usually elsewhere in this report, represent parganas separately, because I am writing now of the general results and because the parganas in their respective assessment reports have already been individually dealt with in full. However, in a few necessary appendices of the area, rent, revenue, &c., I shall bring together the data of each pargana distinctly. For the rest the reports already furnished must be consulted.

Comparison of areas of last and present settlements.

15. The areas of the last and the present settlements inclusive of resumed muáfis are as follows in acres :—

Item.	Total area.	Revenue-free.	Barren.	Groves.	Cultivable.	Cultivated.	Revenue.	Incidence on cultivation.
								Rs. a. p.
Last settlement. ...	726,249	19,198	146,832	9,605	84,756	465,858	619,979	1 5 4
Present settlement ...	726,177	8,855	138,572	7,897	106,369	465,984	754,229	1 9 11
Difference by present settlement.	-72	-10,843	-8,260	-1,708	+20,613	+126	+134,250	+ 0 4 7

Figures shown against last settlement explained.

16. Before I comment on this comparison it is necessary to draw special attention to the figures against "last settlement." They are (with the Dahoh villages added) the issue of the detailed partial carried out in 1865-66 with the view of re-casting the village assessments for a permanent settlement, a measure afterwards abandoned. They are not what Major Ternan assessed on in 1861-63. He went necessarily on the survey figures of 1853-56, since he made no measurement himself preliminary to assessment. Ordinarily those figures would be the right ones to put against "last settlement," but I am afraid that here instead of clearing it would confuse matters, because the first mentioned figures were those considered in the reviews by authority of the last settlement reports, because in the operations of 1865-66 Major Ternan's assessments were partially revised, his sub-divisions of the area altered and the muáfi lands extensively re-adjusted, and because eventually every village jama of Major Ternan's was more or less manipulated to meet the necessities of the new 55 per cent. consolidated demand. I will, however, have occasion to refer to the survey of 1853-56 in comparing the former and present cultivated areas with particular advertence to the increase in the revenue.

17. To return to the above table, the revenue-free area has diminished by more than half since last settlement, and land classed as barren has decreased by over 8,000 acres. In the review of the last settlement Sir William Muir as Lieutenant-Governor observed that he was disposed from his personal knowledge of the district to believe that much land classified as barren was really culturable and would in time be cultivated (Government Resolution No. 1358A., dated 2nd July, 1873, paragraph 15). During the field operations this opinion, which had a special importance coming from the source it did, was borne in mind, and all land under the head barren that could still with any fairness be deemed culturable was transferred to it. But the total increase under culturable exceeds 20,000 acres; the large remainder of some 12,000 acres is chiefly attributable to cultivation thrown fallow in view of the re-settlement.

Revenue-free barren and uncultivated areas.

18. Cultivation would only seem to have increased by the nominal amount of 126 acres, but the comparison is both intrinsically fallacious and present cultivation is also not fully represented in the table. As regards the particular matter of the assessment of the two settlements, the cultivated areas to be first compared are 432,199 acres on which Major Ternan assessed (paragraph 27 of his report No. 30, dated 8th June, 1863,) plus 9,922 acres the old cultivation of the 17 Daboh villages, or a total of 442,121 with 465,984, the figure of the present cultivated area as in the above table; and next this latter has to be corrected by the cultivation wilfully abandoned in anticipation of the settlement. The only feasible way of doing this is to apply the six years' cultivated areas recorded in table VII of the consolidated pargana assessment statements. The sexennial period considered in the assessment of pargana Jalaun was 1286-91 fasli, and that in the remaining parganas was 1287-92 fasli. Thus the year 1286 fasli has the figures of only one pargana, while the year 1292 fasli has those of four parganas; adding the former to the latter, we shall approximately get the cultivated area of all five parganas in 1292 fasli. The other years 1287-91 fasli already precisely contain the cultivated areas of the whole Jalaun tract. The aggregate cultivation for the six years 1287-92 fasli then shows as follows :—

Cultivated area; actual increase in it.

Fasli.	...	...	...	...	...	...	Acres.
1287	...	...	...	...	...	...	476,075
1288	...	...	...	...	...	...	472,817
1289	...	...	...	...	...	...	476,836
1290	...	...	...	...	...	...	471,477
1291	...	...	...	...	...	...	464,687
1292	...	...	...	...	...	...	451,939

It will be noticed here how suddenly the cultivation dropped in the two latest years which were synchronous with the re-settlement. Putting them aside for that reason, the normal cultivation may now be said to stand at 474,301 acres, being the average of the other four years. This again is the khalsa area only. Add 8,011 acres, the cultivation of the resumed muafis, and the whole cultivated area of the present day becomes 482,312 acres. Thus as regards the entire increase on the old revenue, the two cultivated areas to be pitted against one another are 442,121 acres on account of "last settlement" and 482,312 acres on account of "present settlement," giving an increase in cultivation of 40,191 acres, or 9.1 per cent. On the *partial* figures in the table the addition to the cultivation is 16,451 acres, or 3.5 per cent., but this comparison is not germane to the argument regarding the old and new revenue.

19. Those revenues exclusive of nominal assessments are Rs. 6,19,979 and Rs. 7,54,229 respectively. The first figure will be understood by a reference to paragraph 11; it is composed of Major Ternan's effective jama of Rs. 6,03,497 and the old jama of the Daboh villages of Rs. 16,482, without including the *subsequent* increments. The second amount is explained in paragraph 13 and embraces the instalment contributed by the resumed muafis. The whole increase on the demand

Old and new revenue. Increase discussed with advertence to rise in rent-rate and advance in cultivated area.

of last settlement is Rs. 1,34,250, or about 21·7 per cent. Of this, Rs. 56,418\* is

\* The increase of 9·1 per cent. in the cultivated area of last settlement means the same thing as the increase of 9·1 per cent. in the jama of last settlement, taking the increased cultivation to be of the same general quality and value as the old cultivated area on which that jama was imposed. Hence 9·1 of 619,979 = 56,418. To avoid over-valuation the increase in the rent-rate is put out of account here.

supplied by the 9·1 per cent. increase in the cultivation; the balance, Rs. 77,832, or 12·6 per cent., has still to be accounted for in some intelligible way. The rise in rents will more than overtake it. In paragraph 25 of his

report already cited Major Ternan states the general rent-rate of last settlement to have been Rs. 2-10-11 per acre, but this on his cultivation of 432,199 acres would yield assets amounting only to Rs. 11,59,284, whereas two paragraphs further on he puts the "rental assets" of his settlement at Rs. 12,57,245. On this higher figure the general rent-rate of last settlement is Rs. 2-14-7 per acre, which may be assumed to be good for the intercalated Daboh villages also. The similar rate of the present settlement is Rs. 3-6-1, deduced from the aggregate assessable assets of Rs. 15,48,387†

† This figure is the result of employing the *united tenant's rate* in correcting the rent-rolls of all five parganas.

upon the khalsa cultivation of 457,973 acres as in table X of the consolidated statement of pargana aggregates. The rent-rate by this test has risen

7½ annas the acre. The *additional* cultivation of 40,191 acres I have already valued at a revenue charge of Rs. 56,418. Multiplying the other share of the cultivation, *viz.*, 442,121 acres, into the advance in the rent-rate specified above, we get a rental of Rs. 2,07,244 and a revenue of Rs. 1,03,622, while the difference that remained to be justified was Rs. 77,832 only. But as the manner in which Major Ternan expresses himself makes it appear that his rental amount of Rs. 12,57,245 is only an arithmetical result, obtained by calculating back from his jama and cesses, I seek another, and I think a better, basis for the comparison of rent-rates. In the synopsis of village rent-rolls of 1865-66, which was three years after Major Ternan's jamas took effect, to be found at page 87 of the printed report upon last settlement No. 58, dated 30th April, 1869, the *tenants'* cultivation and rent are given at 5,96,247 bighas and 8,61,565 rupees. The former is equal to 277,971 acres, making the rent-rate per acre Rs. 3-1-7.

‡ This is from the recorded holdings and rents of occupancy tenants, tenants-at-will and sub-tenants-at-will and sub-tenants in sub-let sirs; in a word, of all tenants paying full cash-rents.

The tenant's rent-rate is now Rs. 3-8-8½ per acre, showing an increase of Re. 0-7-1, equivalent to 14·3 per cent.

As before, multiplying this increase by 442,121 acres, we get a rental of Rs. 1,95,731 and a revenue of Rs. 97,865 which, again as before, is substantially in excess of Rs. 77,832, the residue of the increased revenue that had to be accounted for; and it must further be remembered that the exhibited increase of cultivation has not been credited with this increase in the rent-rate. On the whole, my idea is that the actual rent-rate has risen by not less than three annas in the rupee, or 18·75 per cent. The above discussion conclusively establishes that, by the most moderate computation of the value of, first, the increase in the cultivation and, second, the increase in the rent-rate, the enhancement of the revenue has been light, although the limit favored by the Government of India has been unavoidably passed.

Comparison of new revenue with Kunch Kálpi settlement.

20. Another good general way of testing the question, whether any suspicion of severity can rest on the increase of revenue taken in this revision, is to look at the incidence of the new revenue in connexion with the incidence of the existing revenue in the regulation tract of Kunch Kálpi. On the whole, there is no remarkable diversity between the productiveness of the two divisions of the district thus brought into comparison. In the material absence of irrigation from our culture and under the prevalence of *páhi* cultivation, by which the tenants of one village freely cultivate in contiguous or adjacent villages, a practice to be found all the district over, rents are not regulated, broadly speaking, by the position of fields or by any empirical qualitative sub-divisions of the area, but solely by the natural property of the soil of



each field. Soils by themselves therefore in the existing state of agriculture are the criterion of the degree of fertility of any particular territory in Jalaun. Accordingly in now comparing the incidence of the revenues of the Jalaun and of the Kunch-Kálpi tracts, I also show against each the proportions in which they possess the several recognised natural soils, including the limited *Tir* and *Cachar* for this purpose in the first or superior *már* soil:—

Tract.	Soils in percentages.					Incidence per acre on cultivated area.
	Már.	Kabar.	Parwa.	Bákar.	Total.	
Jalaun ... ..	35.1	28.1	28.6	8.2	100	1 9 11
Kunch Kálpi (Regulation) ... ..	33.2	34.4	21.2	11.2	100	1 15 1
	+1.9	—6.3	+7.4	—3.0	...	—0 5 2

This comparison in every respect bears favorably on the Jalaun tract.

21. The muáfi plots are for convenience excluded from the analysis of the rent-rolls to which this paragraph is devoted. (1) The declared jamabandis, verified but not corrected, using the word in its technical sense in this connexion, have a recorded rental of Rs. 14,08,768, with a general rate of Rs. 3-1-3 per acre as follows:—

Exposition of declared, fully corrected, assessable, standard and assessed rent-rolls of khalsa area.

Class of cultivating holders.	Number.	Acreage cultivated.	Rent.	Rent-rate.	Remarks.
Tenants-at-will ...	19,978	1,72,531	6,24,937	Rs. a. p. 3 9 11	Of the total cultivation 34,994 acres are with under-tenants for a rent of Rs. 1,37,561, giving a general rent-rate of Rs. 3-14-11 per acre, which is the highest of all the rates.
Occupancy tenants ...	11,847	1,02,577	3,43,067	3 5 6	
Ex-proprietary tenants ...	194	2,074	5,598	2 11 2	
Khúdkásht ...	5,497	64,468	1,37,329	2 14 6	
Sir ...	8,676	99,071	2,19,177	2 3 5	
Favored ...	6,556	17,252	28,660	1 10 7	
Grand Total ...	52,748	4,57,973	14,08,768	3 1 3	

Tenants-at-will and occupancy tenants have each an average holding of nearly nine acres; ex-proprietary tenants and *sir* holders of about 11 acres each; khúdkásht tenants 12 acres; and favored tenants only 2½ acres. Cultivators of all classes amount to 52,748, and the average holding all round is 8.68 acres. (2) If the declared rent-roll were fully corrected according to the old short and simple rule, we would have a gross rental of Rs. 16,11,500, thus: rent paid by *bonâ fide* tenants Rs. 9,73,602, *sir* and other lands held at nominal rents valued at the average tenant-rate Rs. 6,37,898, total as above Rs. 16,11,500.

(3) The assessable assets of the Jalaun tract actually found by me amounted to Rs. 15,72,752, as per margin.\* The correction

	Rs.
* Pargana Jalaun ...	4,82,455
Ditto Orá ...	4,55,150
Ditto Madhogarh ...	2,71,124
Ditto Kunch ...	1,38,362
Ditto Kálpi ...	2,25,661
Total ...	15,72,752

of the declared rent-roll was in this wise. It was accepted as attested for ex-proprietary tenants, tenants with rights of occupancy, tenants-at-will, and sub-tenants of sub-lot *sir*; lands under nominal rents and lands cultivated *khúdkásht* were valued at the average tenant-rate; and *sir* cultivated by

the proprietors themselves or by their servants was only charged with rent at ¾ths of the average tenant-rate. The full extent of this liberal consideration will be better appreciated when I say that, while this ¾ths rent-rate applied to all the *sir* proper did not quite amount to Rs. 2-12-0 per acre, the general rent of the sub-let *sir* is nearly Rs. 4-1-0 per acre; and, whatever appellants may say when it suits their purpose in crying out against the assessment, it is the positive fact that almost universally in this district the general quality of the whole *sir* is superior to the general quality of the rest of the cultivation in a village. The "tenant's-rate" used in the correction of the rent-rolls of parganas Jalaun and Orá or those first assessed was the general rate paid by tenants-at-will, with 25 per cent. off in the case of *sir*;



that used in correcting the rent-rolls of the remaining three parganas, Madhogarh, Kunch and Kálpi, was the general rate deduced from the joint tenancies of both tenants-at-will and occupancy tenants. The modification was enjoined by the Board of Revenue in Mr. Secretary Connell's letter No.  $\frac{51}{1-53}$ , dated 1st February, 1887. I at once gave effect to those orders, and explained in paragraph 2 of my Madhogarh Assessment Report that the valuation of such lands in parganas Jalaun and Orai had proceeded on the rents of tenants-at-will because those really are the full competitive rents of a village, and the law also prescribes the same basis of valuation for leniently determining the  $\frac{3}{4}$ ths rent of ex-proprietary tenants. The rents of occupancy tenants may or not be "full rents;" they are by no means necessarily so, and very often are maintained materially below the full limit by local combination, which the provisions of the law tend to foster. The instruction, however, to unite the holdings and rents of both classes of tenants and to use the rate thus deduced in framing a  $\frac{3}{4}$ ths rental for *sir* and full rentals for khúdkashl, muáfi and other favored lands had the recommendation of operating still further on the side of moderation, and in that view I was glad to adopt it. (4) The standard rent-roll (with the allowance for *sir* made) is Rs. 15,72,320, or almost exactly the same as the assessable assets above defined. How this standard rent-roll was formed has already been told in the assessment reports. (5) The assumed net rent-roll, or the sum of which I took the prescribed half assets or 50 per cent. for the new revenue, is Rs. 14,80,676. Let us now set down these various rent-rolls together:—

	Rs.
(1) Declared rent-roll ... ..	14,08,768
(2) Fully corrected rent-roll ... ..	16,11,500
(3) Assessable rent-roll ... ..	15,72,752
(4) Standard rent-roll ... ..	15,72,320
(5) Assessed rent-roll ... ..	14,80,676
Average ... ..	15,29,208
New revenue (khalisa) ... ..	17,40,338

Of the assessable rent-roll the new demand is only the barest fraction over 47 per cent. I do not think I need expatiate further on the generous forbearance of that demand.

Inspection of villages, assessment circles, standard rent-rates, village rent-rolls, and principles of assessment.

22. I personally inspected every village before assessment, going over its lands, noting the quality of its soils and of such crops as were on the ground at the time, enquiring into the prevailing rent-rates, observing the state of the inhabited hamlet, the general condition of the proprietary and the tenantry, and taking stock of such other facts connected with the village economy as seemed to have a legitimate bearing, even if indirect, on the amount of the revenue to be fixed. I then made a general examination of the village rent-rolls and, collating them with my inspection results and the area tables of the assessment statements, I classified the villages, *i. e.*, formed standard circles of assessment in the language of the rules. In parganas Jalaun, Kunch and Madhogarh I formed four classes or circles of assessment, and in parganas Orai and Kálpi five each. The characteristics of the several classes in each pargana are described in the assessment reports. The next step was to deduce standard rent-rates and standard rent-rolls to lay against the village rent-rolls for purposes of comparison and check. Four classes of soil were worked on, *viz.*, *már*, *kabar*, *parwa* and *rúkar*, a succinct description of which

\* *Már* and *kabar*, though both calcareous soils, both of a prevailing blackish hue and both principally devoted to the growth of wheat (commonly intermixed with gram), have nevertheless strong points of difference. *Már* is undoubtedly more productive; it pulverises freely, and has an extraordinary facility for retaining moisture; it is comparatively easily ploughed, can be very thickly sown, and yields a superior quality of wheat. *Kabar*'s most prominent attribute is cohesion: its specific gravity is sensibly greater than that of any of the other soils. After a rainfall it hardens and can only be turned up by the plough in great clods, and with considerable labor and difficulty; it requires strong cattle to work it well, and it cannot be closely

is quoted in the margin. Standard rates were drawn class by class for each soil from the cultivating holdings therein of tenants paying cash-rents, according to the attested rent-rolls, modified on the minus side to some extent to meet the particular circumstances of the class. The great basis of the revision was to be the village

sown. *Parwa* is a mixed soil of clay and sand, the latter preponderating. It is generally of a light greyish color. Its favorite crops are gram and barley; wheat will not thrive in it in the natural condition of the soil; but artificially fertilized with irrigation and manure, *parwa* will grow most crops. Madhogarh presents numerous examples of the power developed by this soil under high farming. *Rakar* is a refuse soil. It lies on slopes on the beds and on the margins of ravines, and is full of gravel and small pebbles. It is a thin soil, and scantily produces bajra and the poorer pulses and millets. Paragraph 14 of Board of Revenue's Review of the Jalaun settlement No. 846, dated 1st September, 1871.

rent-rolls. My cardinal object therefore was to maintain them to the utmost, totally rejecting them for fraudulent causes as seldom as possible. After considering the village rent-rolls in the various classes, weighing them by my local inspections and referring them to the general conclusions at which I had arrived as to prevailing rent-rates,

I had to admit to myself that the village papers nowhere absolutely and fully exposed actual rent-rolls. That was perhaps too much to expect. What I had to do was to accept the rent-rolls unless palpably bad, and, moreover, where they were deemed fairly full I thought it expedient, and it conduced to moderation and to that keeping as far as possible within the one lakh limit of increase approved by the Government of India, to make due allowance for the ordinary risks attendant on rent collections before assessing on the corrected rent-roll. The simple kind of bad debts I here refer to, as I said in my Orai Assessment Report, are not to be confounded with the graver inability to pay up, which is sometimes caused by an extensive failure of crops from widespread calamities of season. It is the distinct task of the district administration to deal with such as they occur. Accordingly I gave drawbacks on the rental, ranging from  $\frac{1}{16}$ th or one anna in the rupee ( $6\frac{1}{4}$  per cent.) in superior villages to  $\frac{1}{8}$ th or two annas in the rupee ( $12\frac{1}{2}$  per cent.) in inferior ones. In the former cases the fertility of productiveness reduces the risk to very small dimensions; in the latter there is more uncertainty, and cultivators are consequently more unpunctual in paying up. This provision of allowances enabled me in numerous instances to compromise with the necessity of rejecting obnoxious rent-rolls. Where the corrected rent-roll of an estate was full or reasonably full, I made the ordained abatement on the whole tenancy rental. But, as often happened, where the recorded occupancy rent was at a rate markedly below what was paid in the same village by tenants-at-will I made the abatement on the latter rental only; and, again, where the whole rent-roll was tangibly short of a full rental, yet was not so bad as to demand total rejection, I entirely withheld the abatement, taking in these latter cases the direct half of the rent-roll for the new jama. *Sir* had already received its freehanded reduction of 25 per cent. and required no further drawback. Fields under *kans* have been put out of the cultivated area altogether. Cultivating communities or large proprietary bodies have received adequate consideration. Any peculiar advantages or disadvantages special to particular villages were duly taken into account. Those briefly are the principles of assessment I have observed, and the Board of Revenue have already had frequent opportunities of seeing that I have actually practised them. In every village statement I have written remarks fully explanatory of the assessment imposed.

23. As a useful record, for future reference, I here group the soil standard rent-rates found for each circle of assessment in each pargana so far as it affects the Jalaun tract :—

Soil standard rates of each circle of assessment.

Pargana.	Class or circle of assessment.	SOIL STANDARD RATES PER ACRE.				Total or general rate.	Remarks.
		Már.	Kahar.	Parwa.	Rákar.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
JALAUN.	Class I	5 0 0	4 8 0	4 4 0	3 4 0	4 14 4	Three-fourths of these standard soil-rates were used for valuing <i>sir</i> in deducting the standard rent-rolls.
	Class II	4 9 0	3 14 0	3 10 0	2 2 0	4 0 1	
	Class III	3 14 0	3 0 0	2 12 0	1 10 0	2 15 6	
	Class IV	2 14 0	2 4 0	1 12 0	1 2 0	1 14 11	
	Whole pargana	4 11 0	3 8 0	3 0 1	1 11 0	3 12 7	

Par-gana.	Class or circle of assessment.	SOIL STANDARD RATES PER ACRE.				Total or general rate.	Remarks.
		Már.	Kabar.	Parwa.	Rákar.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
ORAI.	Class IB ...	5 12 0	5 0 0	3 6 0	3 2 0	4 5 0	
	Class IA ...	4 11 0	4 4 0	3 2 0	3 0 0	3 13 0	
	Class II ...	4 4 0	3 12 0	3 0 0	2 7 0	3 5 9	
	Class III ...	4 0 0	2 13 0	2 7 0	1 10 0	2 11 6	
	Class IV ...	3 0 0	2 2 0	2 0 0	1 4 0	2 1 6	
	Whole pargana ...	5 3 3	3 13 9	2 12 3	1 14 8	4 2 8	
MADHO-GARH.	Class I ...	5 0 0	4 8 0	4 4 0	2 3 0	3 15 9	
	Class II ...	4 3 0	3 9 0	3 6 0	2 0 0	3 4 3	
	Class III ...	4 0 0	2 15 0	2 12 0	1 11 0	2 13 6	
	Class IV ...	3 8 0	2 2 0	2 0 0	1 3 0	2 3 3	
	Whole pargana ...	4 2 6	3 4 6	3 1 6	1 12 3	3 1 2	
KUNJ.	Class I ...	5 2 0	4 15 0	3 13 0	3 4 0	4 4 6	
	Class II ...	4 5 0	3 14 0	3 7 0	2 12 0	3 9 6	
	Class III ...	3 10 0	3 3 0	2 7 0	2 2 0	2 13 6	
	Class IV ...	3 6 0	2 14 0	1 14 0	1 6 0	2 6 0	
	Whole pargana ...	4 1 9	3 7 6	2 14 3	2 6 0	3 3 4	
KUPRI.	Class I ...	4 9 0	3 1 0	3 6 0	2 6 0	3 5 6	
	Class II ...	3 15 0	2 13 0	2 10 0	1 6 0	2 11 0	
	Class III ...	3 1 0	2 8 0	2 6 0	1 4 0	2 4 3	
	Class IV ...	2 5 0	2 1 0	1 15 0	1 2 0	1 13 9	
	Class V ...	2 1 0	1 8 0	1 5 0	1 0 0	1 7 6	
	Whole pargana ...	3 9 0	2 6 2	2 4 2	1 2 10	2 5 6	

Treatment of estates falling under rule 10 (b) for fraudulent rent-rolls.

24. Out of the total number of 949 maháls 170 were treated under rule 10 (b) for either fraudulent concealment or designed lowering of rents, or intentional abandonment of cultivation; but I was tender with them. Their aggregate corrected rent-roll amounted to Rs. 2,76,065 and the rent-roll on the "village rates" determined for them was Rs. 3,06,978. The difference is Rs. 30,913, or 11.2 per cent. All the assessment statements of these estates were completed and sent up to the Board of Revenue for sanction prior to declaration of the new jamas, and they were made the subject of special notice in the assessment reports with their accompaniments.

Sair income.

25. As to rule 15 regarding sair income, the Board in the course of the work asked whether such income had been noticed in the assessment statement in cases in which it was appreciable and material, and how far I had taken it into account in fixing the jama. I reported that the difficulty I had to contend with was to keep the assessment down to the prescribed limit, that I had no occasion therefore to assess sair or natural products, such as fruit, fish, &c., and that the income from such sources was not appreciable.

Progressive demands.

26. Under rule 16, which is a provision against largo and sudden enhancements, progressive demands were proposed by me in 202 cases; the Board struck off 23 of

these and added 21 others, leaving 200 on the roll. The effect on the aggregate demands is exhibited in the following table :—

Pargana.	New jama, inclusive of recently resumed muasifs.	PROGRESSIVE DISTRIBUTION.								
		1st year.	2nd year.	3rd year.	4th year.	5th year.	6th year.	7th year.	8th year.	9th year to end of settlement.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Jalaun ...	2,36,087	2,29,472	2,33,201	2,36,087	2,36,087	2,36,087	2,36,087	2,36,087	2,36,087	2,36,087
Orai ...	2,18,186	2,05,280	2,05,280	2,12,696	2,18,186	2,18,186	2,18,186	2,18,186	2,18,186	2,18,186
Madhogarh ...	1,27,980	1,25,243	1,25,243	1,26,989	1,27,627	1,27,916	1,27,916	1,27,966	1,27,966	1,27,980
Kunch ...	66,103	62,525	62,525	63,880	64,654	65,908	66,048	66,078	66,078	66,103
Kalpi ...	1,05,873	1,04,025	1,04,025	1,05,217	1,05,516	1,05,821	1,05,821	1,05,873	1,05,873	1,05,873
Total ...	7,54,229	7,26,545	7,30,274	7,44,869	7,52,100	7,51,008	7,51,058	7,51,190	7,54,190	7,54,229

27. The exceptional cases that fell under rule 17 relating to abnormal percentages of assessment were reviewed and passed by the Senior Member. Real cases of revenue taken above 55 or below 45 per cent. of assets there were practically none. They nominally appeared when the percentage was calculated directly on the corrected rent-roll, but vanished when it was put upon its true basis, namely, the lower net assets which the Settlement Officer had found and on which he assessed.

Cases of assessment above 55 or below 45 per cent. assets.

28. Rules 18 and 19 were a dead letter in this settlement. The landlords of Jalaun are not an enterprising race. No landlord, as required by the rules, brought to my notice any instance of improvements made by him, the fruits of which should be temporarily exempted from assessment. Landlords have nowhere provided irrigation works to which increased rents might be attributed. Katcha wells in pargana Madhogarh and elsewhere are pretty extensively used for irrigation to grow sugarcane, but these are dug by the cultivators themselves; it matters not whether they be of the proprietary body or pure tenants, for their rents are not increased because of the irrigation. No special outlay of any kind came to my knowledge requiring consideration. Lands formerly unreclaimed waste have certainly been brought under cultivation, but they have not been thus recovered at the landlord's expense. A cultivator will take up a piece of likely waste on a favorable lease; the first year he will pay no rent, the second year two annas, the third four annas a bigha, and the fourth year the full rent whatever it may be. This is a typical case, but there may be modifications according to the nature of the waste, for instance in good waste the peppercorn rent of two annas a bigha may be levied in the first year, and the full rent reached in the third year. Irrigation from the Betwa Canal is extending apace, but in this great work of improvement also the landlords have had no part or lot.

Exemption of improvements from assessment.

29. In the preliminary orders Government exhibited some anxiety as to the lenient and uninquisitorial treatment of *sir*. In every pargana assessment report I was careful to show that this indication of the wishes of Government had been remembered. The village *jamabandis* contained a record of 95,124 acres of *sir*. No reduction was made in this quantity. On the contrary, in the attestation of the *jamabandis* a further area of 3,947 acres was admitted as *sir*, making the total 99,071 acres, which is 21.6 per cent. of the khalsa cultivated area: 16,242 acres or 16.4 per cent of the *sir* was found sub-let to sub-tenants upon a rental of Rs. 65,610, being at the rate of Rs. 4-0-8 per acre, while, as already stated in paragraph 21, all the rest of the *sir* has been rated at only Rs. 2-12-0 per acre. I am not sure that this new departure in settlement is altogether a judicious one. It certainly tends to moderation of assessment in coparcenary tenures, but even there it acts unequally. In the distribution of the village jama after the revenue engagement has been signed by the *lambardars*, the individual *sir* holdings have to be followed out fairly in the

*Sir*, its treatment in the present settlement and its bearing on future settlements.

pattis. Two equal shareholders may thus find themselves saddled with different quotas of the jama, and the man whose quota is larger may be excused if he cannot quite see the justice of it. It is also conceivable that in the course of the settlement the shareholder on the lighter quota may be bought out by the village banker when all the ruth of Government is simply wasted, and the heartburning of the other more heavily saddled co-sharer is at the same time greatly intensified. It may be answered that the banker cannot fully benefit because of the provisions of the law regarding the similarly reduced rents to be determined for ex-proprietors, but this legal barrier proves a frail one in nine cases out of ten. The ex-proprietor is made to contract himself out of the law. In the sale or mortgage deed he expressly abandons his *sir* and admits its liability to full rent. Where this is not openly done the astute banker still seldom or never fails in some way or other to pounce effectually on the *sir*, and he will thus in the future reap all the advantage of the lighter *sir* assessment for himself. It is undeniable that this new feature in assessment introduces more or less inequality in the distribution of the revenue throughout coparcenary tenures. Then, at the next revision of settlement, the sub-tenant in *sir* will almost certainly be extinct. Occupancy rights cannot be acquired by a sub-tenant in *sir*, and as a moveable or removeable chattel the proprietor on the approach of a re-settlement will summarily disestablish him rather than have the man's holding rated at some 45 per cent. above his own *sir* proper, which is the present difference between the rent-rates of the self-cultivated and the sub-let *sir*. The misery inflicted on the sub-tenant may be pitiable and very reprehensible, but the proprietor in his own interest will be impelled to such evictions, and it is our own unbalanced sympathies that will have put the temptation in his way. Again, a very large accession to the *sir* area may be anticipated at next settlement. The proprietor would be a shortsighted simpleton if his best efforts were not devoted to put under his own cultivation as much of his lands as his own ploughs can possibly cover, whether worked by the hands of himself, of the members of his family, or of paid servitors, *i.e.*, *karwahas*, who may be recruited to any extent from the poor *chamars* of the neighbourhood. All such cultivation held up for 12 years would be *sir*, entitled to the 25 per cent. reduction on the general tenant-rate. The revenue would probably suffer so much that some modification of the present rule, unlimited as it is in its application to all *sir* proper, however extensive, would become imperative.

Number of instances in which the old revenue is increased, maintained or reduced.

30. There are 949 mahals. In 733 or 80 per cent. the old revenue has been enhanced, in 153 or 14 per cent. it has been maintained, and in 63 or 6 per cent. it has been reduced. My assessments were modified by the Board in 74 cases, 72 being on the side of increase and only 2 on that of decrease. The two reductions were in parganas Kunch and Kalpi. The 72 augmentations were 59 in pargana Jalau, 7 in Madhogarh, 2 in Kunch and 4 in Kalpi. In pargana Orai none of my assessments was changed. The 72 increases amounted to Rs. 2,388 and the 2 decreases to Rs. 54, being a total change of Rs. 2,422 or 3.5 per cent. on the revenue of the mahals concerned. The modification per mahal was Rs. 33 only. The aggregate new revenue in these 74 cases is Rs. 68,807.

beneficial tenures.

31. In this Jalau tract there are 33 mahals comprised in 26 villages, under beneficial tenure, being of the nature of *ubaris*, *muafis*, half jamas, &c. They have been specified for each pargana in the assessment reports. Their present payment to Government amounts to Rs. 12,821, which is the sum that has been included in the effective jama of the Jalau tract mentioned in the previous paragraphs. The provisional future full revenue is Rs. 28,341, so that the postponed share of revenue of these special holdings is Rs. 15,520. I have omitted mauza Hatheri, pargana Jalau, from the above figures because, though it is a talukadari tenure with superior and inferior proprietors, it already pays full jama.

Remaining revenue-free plots.

32. There yet remain a considerable number of revenue-free plots in the Jalau tract. The following table exhibits them by parganas. Half jama plots

have been included because by the legal definition of the term "revenue-free" they are to be reckoned as such. Even excluding them, the pure muáfi plots still amount to nearly nine thousand acres.

Pargana.	Muáfi on half jama.			Life muáfi.		Muáfi being religious grants under conditions.		Muáfi in perpetuity.	
	No. of plots.	Area in acres and decimals.	Half jama.	No. of plots.	Area.	No. of plots.	Area.	No. of plots.	Area.
Jalaun ...	166	3,264-01	2,026	87	2,424-67	65	311-14	1	249-96
Orai ...	14	434-52	407	19	3,594-16	29	322-56	...	...
Madhogarh ...	81	816-35	441	67	626-83	47	431-31	...	...
Kunch ...	18	232-27	190	26	251-23	22	98-07	3	161-02
Kálpi ...	16	316-35	227	19	176-19	34	202-54	...	...
Total ...	295	5,063-50	3,291	218	7,073-08	197	1,366-52	4	410-98

23. The 12 per cent. cess has been imposed on all liable revenue-free lands, as shown in the accompanying detailed statement, of which an abstract is furnished below : 138 plots, with an area of 3,144 acres, have been assessed to provisional jamas, amounting to Rs. 6,769, on which the 12 per cent. cess aggregates Rs. 811-14-0, being an increase of Rs. 209-2-0 on the existing cess.

12 per cent. cess  
revenue-free lands.

Pargana.	Number of plots.	Area in acres.	Rental assets.	Nominal jamas.	New 12 per cent. cess.	Existing cess.	Increase.	
							Amount.	Per cent.
			Rs.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Jalaun ...	75	2,105	9,499	4,743	569 0 0	416 5 0	152 11 0	37
Orai ...	14	291	1,194	596	71 6 0	51 6 0	20 0 0	39
Madhogarh ...	23	216	827	412	49 6 0	31 13 0	17 9 0	55
Kunch ...	19	380	1,572	787	94 8 0	81 7 0	13 1 0	16
Kálpi ...	7	143	462	231	27 10 0	21 13 0	5 13 0	27
Total ...	138	3,144	13,554	6,769	811 14 0	602 12 0	209 2 0	34

34. Under rule 2, Extant Circular No. 36-IV, and Extant Circular No. 37-IV, revenue free holdings which would give less than one rupee and religious endowments which would yield less than 10 rupees are exempt from any charge on account of cesses. Nominal jamas, however, have been calculated for them also, to show the loss sustained under this head of local cess, as required by Extant Circular No. 40-IV. There are 257 such plots, with an area of 1,214 acres, on which the aggregate nominal revenue is Rs. 2,169, and the cesses are Rs. 260-15-0, as shown below, by parganas :—

Revenue-free plots  
exempt from cesses.

Pargana.	Number of plots.	Area in acres.	Nominal jamas.	Nominal cesses.
			Rs.	Rs. a. p.
Jalaun ...	69	279	568	68 4 0
Orai ...	31	318	525	63 1 0
Madhogarh ...	80	282	538	64 11 0
Kunch ...	32	121	245	29 7 0
Kálpi ...	45	214	293	35 8 0
Total ...	257	1,214	2,169	260 15 0

Résumé of the various  
revenue figures.

35. A résumé of all the revenue figures may now be conveniently given :—

	Rs.
1. Real revenue of last settlement ... ..	6,19,979
2. Real revenue of last year of last settlement ... ..	6,28,474
(Revenue improved in course of settlement by ... ..)	8,495)
3. New Khalisa revenue of present settlement ... ..	7,40,338
4. New revenue on resumed <i>muáfis</i> ... ..	13,891
5. Total new revenue (real) ... ..	7,54,229
6. Add postponed share of provisional full revenue on beneficial tenures ( <i>maháls</i> ) ... ..	15,520
7. Add also ditto of half <i>jama</i> plots ... ..	3,291
8. Add also nominal <i>jamas</i> of existing revenue-free plots ... ..	8,938
9. Gross assessment (total of 5—8) ... ..	7,81,978
10. Increase of real <i>khalisa</i> revenue in present settlement (3 over 2) ... ..	1,11,864
11. Increase of total real revenue (5 over 2) ... ..	1,25,755

Revised *kistbandis*.

36. Opportunity was taken to revise the *kharif* and *rabi* instalments by which the new assessment was to be paid, as a good *kistbandi* is of the first importance in securing the punctual and easy collection of the revenue. A perfectly fair and reasonable assessment may be altogether spoiled by injudicious distribution. I examined the *kharif* and *rabi* productions of each village for the past six years, percentaged them, struck the average for each harvest, modified these averages as necessary by my inspection notes and the settlement statistics before me, and then adjudged the number of annas in the rupee (which furnished the share of the revenue) to be paid in either harvest. These revised *kistbandis*, having been sanctioned by the Board of Revenue, were put into force with the new assessment.

Land and rent of tenants  
of past and present settle-  
ments.

37. It is difficult to give a uniform comparison between the land and rent of tenants for the past and present settlements, because, on the one hand, the statistics of last settlement did not contain the *Daboh* villages, and, on the other, a large quantity of the actual cultivated area has been designedly thrown waste in the present settlement. I, however, show below the available figures. The rent is shown as recorded in the village rent-rolls, it being unnecessary to correct the *sir* and *khudkásht* here.

Settlement.					Under <i>sir</i> and <i>khudkásht</i> .		Under tenants.	
					Land.	Rent.	Land.	Rent.
						Rs.		Rs.
Old	...	...	...	...	166,800	3,96,553	277,871	8,61,565
New	...	..	...	...	182,326	4,39,324	282,948	9,90,986

At last settlement 62·5 per cent. of the cultivated area was under tenants ; now the proportion is 60·8 per cent. Land with occupancy rights upon it was formerly 20·8 per cent., while at present it is 22·9 per cent. of the cultivated area. The absolute quantity by which occupant tenancy has advanced in 20 years is about ten thousand acres, or 500 acres per annum, a small and slow rate of growth.

Irrigation and the Betwa  
Canal (wells).

38. Hitherto irrigation has remained an exceedingly feeble and limited power in the agriculturo of the district. The total number of wells in the whole of this tract is about 6,000, of which 3,250 are of masonry and are chiefly used for drinking water. Some irrigation is also done from 2,870 wells, mostly *kacheha* : 6,534 acres are thus watered, and another 6,19½ acres are irrigated from other sources (not counting the Betwa Canal). In the entire *Jalaun* tract therefore the wet land may be said to have hitherto amounted to not more than 12,728 acres, or about 2·8 per cent. of the cultivated area. But the future should see all this changed. The Betwa Canal is rapidly becoming a potent factor in *Jalaun* husbandry. In the Government Review of last settlement, dated 2nd July, 1873, it was referred to in these terms : “ the projected Betwa Canal is expected to command a large portion of the

district, and if carried into effect will give new fertility to a country where water, except the rain of heaven, is hardly known as an aid to agriculture, and where the traveller often passes over a parched and treeless tract for miles without seeing a single well. The canal will, if completed, according to its present design, cause an improvement hardly at present to be imagined, and make the wilderness to blossom as a rose." Obstacles came between, and the Betwa Canal was not an accomplished fact until the year 1885. In Appendix III will be found an interesting memorandum on this canal written by Mr. W. P. Hörst, Executive Engineer. It has two branches in this district, called the Kathaund and the Hamirpur. The former, after a course of  $65\frac{1}{2}$  miles, of which 43 miles are in Jalaun, falls into the Jumna ravines near Randhirpur. The latter traverses 83 miles, of which 44 are in Jalaun, and falls back into the Betwa five miles from the civil station of Hamirpur. About 300 miles of distributaries also lie in this district. Mr. Hörst gives a village statement, showing the soil areas commanded in each pargana, as the ultimate prospect. But up to date the progress has been as follows :—

Rabi of 1885-86	...	...	...	...	228 villages received water.
Kharif „ 1886-87	...	...	...	...	168 ditto.
Rabi „ „	...	...	...	...	209 ditto.
Kharif „ 1887-88	...	...	...	...	183 ditto.
Rabi „ „	...	...	...	...	365 ditto.

The area irrigated has been as follows :—

					Acrea.
Rabi of 1885-86	...	...	...	...	12,166
Kharif and rabi of 1886-87	...	...	...	...	8,606
Ditto „ 1887-88	...	...	...	...	24,011

The revenue obtained from water rates has been as under :—

					Rs.
1885-86 (rabi only)	...	...	...	...	=13,642
1886-87 do.	...	...	...	...	=20,780
1887-88 do.	...	...	...	...	=63,597

The canal was first opened in September, 1885, in time for the *paleo* watering of the rabi of 1885-86, and, considering the dull inertia and the rooted prejudices to be overcome on the part of the stolid Bundelkhand agriculturist, the results of  $2\frac{1}{2}$  years' work are satisfactory and even cheering. Mr. Hörst's paper also glances at the further financial prospects of the canal. Wheat is now raised on *parwa* soil where only barley could be grown before. The area of sugarcane has notably increased and is steadily growing. Indigo, too, is advancing. Rice cultivation unfortunately has not yet found a footing, and Mr. Hörst shows how great things might be done with it. The people have no knowledge of the methods of rice cultivation, but once this ignorance is removed there is no good reason why over much of the *mār* and *kabar* lands rice should not become an established staple with the help of canal water. It has been noticed that already the spring level of the country has been favorably affected by the canal. The wilderness may not yet have begun to blossom as the rose, but this great public work is surely destined to transform the face of the country, giving the variety and fertility of a garden to the present rude and simple style of cultivation, which never ventures beyond the immemorial *juār* and *bājra* crops in *kharif* and intermixed wheat and gram in *rabi*. The common use of water as a new element in local agriculture will also naturally tend to civilize, as it were, the rough and unkempt form of tillage at present too much in favor.

39. The following tables (a) and (b) give with sufficient fulness the crops of the rabi and *kharif* harvests with their acreage. The first table states the crops by harvests and the second by general classes. The practice of intermixing crops makes

Kharif and rabi crops.



it difficult to assign its correct area to each crop. To avoid overlapping of areas from this cause I have counted the land of a field so intermixed to the main crop growing in it, naming the subsidiary crops also wherever the intermixture is in substantial quantity.

*Statement A—Crops of each pargana by harvests.*

Pargana.	Rabi.						Kharif.						Grand Total.
	Wheat as well as wheat and gram mixed.	Barley as well as barley and gram mixed.	Gram.	Garden produce.	Other crops.	Total of rabi.	Juár.	Bája.	Cotton.	Sugarcane and garden produce.	Other crops.	Total kharif.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Jalsun ...	51,317	5,792	15,232	88	11,536	83,965	23,195	12,357	12,278	349	2,136	50,315	1,84,280
Orai ...	73,427	2,873	7,061	182	1,025	81,568	14,008	6,419	516	127	10,970	32,040	1,16,608
Kunchi ...	16,169	652	4,355	37	301	21,514	869	2,338	5,694	9	7,738	16,648	38,162
Madhogarh ...	20,406	7,861	12,008	44	1,520	41,839	16,766	9,845	7,645	1,461	1,866	37,586	79,425
Kálpi ...	26,801	9,353	7,529	52	4,123	47,858	162	12,557	8,944	77	19,300	41,640	89,498
Total ...	188,120	26,531	46,185	403	18,595	279,744	55,000	43,516	35,077	2,026	42,610	178,229	457,978

*Statement B—Crops by classes.*

General class.	Particular crop.	Acreage.
1	2	3
I—Crops of superior value.	Cotton ...	35,077
	Sugarcane ...	694
	Garden vegetables ...	1,735
	Mixed spices, viz., ajwain, turmeric, onion, chillies, methi, &c. ...	27
	Zira ...	660
	Dantiya ...	1,898
	Tobacco ...	193
	Poppy ...	1,060
	Total ...	41,344
II—Cereals	Wheat alone ...	3,122
	Barley alone ...	135
	Wheat and gram mixed ...	1,84,998
	Barley and gram ...	26,396
	Coarse rice ...	972
	Juár ...	55,000
	Bája ...	43,516
	Other small millets, kakni, kuzi, sama, marua ...	1,941
	Total ...	316,080
III—Pulses or leguminous seeds.	Gram ...	46,185
	Achur ...	8,227
	Peas ...	22
	Moth ...	25,230
	Mung with urd ...	45
	Kodo ...	727
	Total ...	80,436

## Statement (B)—Crops by classes—(concluded).

General class.	Particular crops.							Acroage.
1	2							3
IV—Oilseeds	{	Alsi	...	...	...	...	...	1,230
		Tili	...	...	...	...	...	1,088
		Other oilseeds, castor, rai and sarson					...	9,683
	Total					...	12,001	
V—Dyes	{	Al	...	...	...	...	...	798
		Indigo	...	...	...	...	...	167
		Kusum (safflower)	...	...	...	...	...	5
	Total					...	970	
VI—Fibres	...	Hemp (saun)					...	1,434
VII—Miscellaneous,	...	Mixed crops in small quantities, chiefly pulses, millets, &c.					...	5,708
Grand Total					...	4,57,973		

40. The following table exhibits the prices current of the chief food crops and of salt, on the average of three periods of five years each, and individually for the last three years. The cheap prices of the past, especially as regards wheat and gram, will probably never recur again, with the Indian Midland Railway now open. Foreign and distant markets where prices may run high will henceforth be able to keep easy touch with our local markets and influence their selling prices. It will be some time, however, before the slow moving rustic wakes up to the new order of things, and when he does, poor fellow, he must find, as best he can, the ability to benefit from it. It is the local *sao* or graindealer, with here and there some astute and thrifty landlords, exceptions to their species, who will at once wax fat on the lucrative opportunities thus opened out to them.

Prices current.

	Rate per rupee (in seers of 80 tolas).									
	Wheat.	Barley.	Rice (fine).	Rice (coarse).	Juār.	Bājra.	Gram.	Arhar (dāl).	Salt (Sambhar).	
1	2	3	4	5	6	7	8	9	10	
1870-74	...	21	26	8	11	23	22	25	19	6
1875-79	...	20	22	8	13	24	23	25	18	8
1880-84	...	20	22	8	12	27	19	26	15	10
1885...	...	23	25	9	11	22	24	30	21	10
1886...	...	20	23	9	11	23	20	32	30	11
1887...	...	20	23	9	11	24	23	27	28	11

41. The following statement clearly exhibits the alienations of landed property during the 20 years ending with 1886 under the three different heads of private sale, public auction and court decrees. In all 11 whole estates and 1,779 parts of estates of an aggregate area of 187,736 acres, and liable for a revenue demand of Rs. 1,00,039, sold for the sum of Rs. 10,78,025, being at the rate of 10·8 years' purchase and a price per acre of Rs. 10-0-1. This was, on the whole, a satisfactory selling price. The information, it will be noticed, is by parganas. All parganas show well except Kálpi, which is particularly bad. To understand the contrast and what would appear to be the extremely low price of land in it, it must be remembered that

Transfers.

the value per acre is on the total area, that no pargana has such a large admixture of barren ravines in its superficies as Kálpi, and that otherwise too Kálpi is decidedly the worst pargana of the district. In every pargana except Orai the best price was always fetched by private sales; the exception is of no special force as it would seem that only a few hundred acres of good land in Orai came under public auction, and from their quality naturally brought a high price. These voluntary sales, as they might be called, also far outweighed the compulsory sales and transfers, 81,041 acres being parted with by the former means against only 26,695 acres by the latter. Alienations were heaviest in pargana Kálpi. In it 24·6 per cent. of its total area changed hands, while the other parganas kept far below that proportion, the exact figures being Jalauu 12·6, Orai 10·4, Madhogarh 12·9 and Kunch 12·7 per cent. No useful comparison can be made with the transfers of the previous settlement, for, as stated in paragraph 28 of the Board's Review dated 1st September, 1871, the transfers noted in Major Ternan's reports represented the value at so small a figure that without further explanation the statements were unintelligible; and I am not aware that any further explanation was ever given.

Pargana.	Description of transfer.	Estates.		Area in acres.	Price.	Revenue.	Price per acre.	Number of years' purchase.
		Entire.	In part.					
Jalauu	Private sale...	4	379	18,712 0 0	2,96,010 9 4	21,393 3 5	15 13 9	12·1
	Public auction	...	28	2,025 0 0	15,350 1 3	2,810 12 2	7 9 3	5·8
	Court decrees	1	22	1,778 0 0	14,429 1 9	1,962 3 8	8 1 10	7·4
	Total	5	429	22,515 0 0	3,25,789 12 4	29,166 3 3	14 14 8	11·1
Orai	Private sale...	...	212	15,213 0 0	2,12,018 12 9	16,226 4 10	13 15 0	13·1
	Public auction	...	20	637 0 0	11,256 5 0	784 5 2	17 11 9	14·4
	Court decrees	...	75	4,805 0 0	57,571 1 3	5,244 4 4	12 1 0	11·1
	Total	...	307	20,655 0 0	2,81,316 3 0	22,254 14 4	13 9 10	12·7
Madhogarh	Private sale...	...	319	9,153 0 0	1,42,184 0 0	10,643 0 0	15 8 7	13·4
	Public auction	...	22	1,638 0 0	13,516 0 0	2,127 0 0	8 4 4	6·4
	Court decrees	...	68	3,843 0 0	49,303 0 0	4,992 0 0	12 13 3	9·9
	Total	...	409	14,634 0 0	2,05,003 0 0	17,762 0 0	14 0 0	11·5
Kunch	Private sale...	1	83	4,797 0 0	79,016 7 3	4,411 15 6	16 7 7	17·8
	Public auction	...	14	590 0 0	4,541 12 0	797 3 0	7 11 3	5·6
	Court decrees	1	29	3,001 0 0	17,519 11 10	2,233 9 10	5 13 5	7·8
	Total	2	126	8,388 0 0	1,01,080 15 1	7,475 11 4	12 0 10	13·5
Kálpi	Private sale...	3	493	33,196 0 0	1,21,389 10 6	16,782 4 3	3 15 1	7·2
	Public auction	...	12	1,575 0 0	5,659 0 0	1,333 6 5	3 9 6	4·5
	Court decrees	1	63	6,803 0 0	37,757 0 0	5,363 15 2	5 8 10	7·0
	Total	4	478	41,544 0 0	1,61,805 10 6	23,379 9 10	3 1 6	7·0
GRAND TOTAL		11	1,779	1,07,736 0 0	10,78,024 8 11	1,00,038 10 1	10 0 1	10·8

42. These proprietary transfers are followed out, in the five pargana tables given below, to the different castes making and taking them. In Jalain, Thākurs, Brāhmins and Kūrmis; in Orai Lodhis, Kūrmis and Brāhmins; in Madhogarh Brāhmins and Thākurs; in Kūch Gūjars and Kūrmis; and in Kālpi Thākurs and Brāhmins were the most extensively concerned.

Transferees and trans-  
ferees.

(1) *Pargana Jalain.*

Caste.	Proprietors Transferers.					Transferees.				
	Number.	Whole mahals or villages.	Fractional shares.	Area in acres.	Revenue paid.	Number.	Whole mahals or villages.	Fractional shares.	Area.	Revenue paid.
1	2	3	4	5	6	7	8	9	10	11
					Rs. a. p.					Rs. a. p.
Thākur ...	185	2	140	6,059	7,174 2 10	150	2	107	5,595	7,068 8 4
Brāhman ...	173	1	131	7,048	8,251 8 4	238	1	199	10,108	13,744 1 3
Kaisth ...	39	1	31	2,090	2,818 14 1	40	1	31	2,070	2,330 1 2
Marwāri ...	2	...	2	339	567 10 4	14	...	10	651	680 9 1
Ahīr ...	27	...	24	722	590 7 1	8	...	8	377	200 7 9
Gūjar ...	36	...	21	1,711	2,784 4 9	27	...	21	1,431	1,866 8 0
Goshain ...	1	...	1	71	98 9 5	2	...	2	395	530 5 11
Bhāt ...	11	...	5	525	409 13 6	...	...	...	...	...
Musahmān ...	24	1	16	500	677 9 3	10	1	7	355	385 12 11
Lodhi ...	1	...	1	70	104 2 4	...	...	...	...	...
Lohār ...	...	...	...	...	...	1	...	1	63	122 8 0
Khatrī ...	...	...	...	...	...	3	...	2	116	208 4 8
Kūrmī ...	86	...	50	2,703	4,976 13 2	23	...	15	445	876 13 7
Bania ...	4	...	2	193	386 0 0	33	...	22	735	688 14 1
Kalār ...	...	...	...	...	...	2	...	2	24	42 14 8
Badrāgi ...	1	...	1	261	143 0 0	1	...	1	46	104 5 4
Government ...	1	...	1	223	183 4 2	...	...	...	...	...
Khanjar ...	...	...	...	...	...	1	...	1	4	7 0 6
Total ...	591	5	429	22,515	29,196 3 3	608	5	429	22,515	29,196 3 3

(2) *Pargana Orai.*

Caste.	Proprietors Transferers.					Transferees.				
	Number.	Whole mahals and villages.	Fractional shares.	Area.	Revenue paid.	Number.	Whole mahals and villages.	Fractional shares.	Area.	Revenue paid.
1	2	3	4	5	6	7	8	9	10	11
					Rs. a. p.					Rs. a. p.
Kaisth ...	15	...	12	1,521	1,241 0 0	6	...	5	547	316 8 0
Musahmān ...	20	...	16	1,568	1,012 2 0	10	...	10	524	648 15 5
Brāhman ...	84	...	62	4,038	5,959 9 0	138	...	111	8,613	9,976 6 5
Marwāri ...	9	...	9	593	590 0 0	65	...	69	4,164	4,334 4 9
Ahīr ...	23	...	18	1,142	796 6 11	5	...	4	202	111 0 0
Lodhi ...	135	...	109	5,255	4,696 13 8	39	...	35	1,826	1,267 12 11
Kalār ...	...	...	...	...	...	3	...	6	442	355 11 10
Bania ...	6	...	3	227	155 0 0	44	...	34	1,474	2,639 14 5
Kūrmī ...	90	...	62	2,603	4,829 0 3	56	...	41	1,627	2,826 15 0
Thākur ...	68	...	33	3,503	2,759 10 1	14	...	10	663	561 0 0
Teli ...	...	...	...	...	...	3	...	3	87	161 0 9
Sonār ...	...	...	...	...	...	1	...	1	40	35 0 0
Chamār ...	...	...	...	...	...	3	...	2	72	123 0 0
Goshain ...	6	...	6	94	197 0 0	...	...	...	...	...
Beldār ...	1	...	1	19	27 0 0	1	...	1	19	27 0 0
Jāt ...	...	...	...	...	...	1	...	1	24	43 0 0
Bhāt ...	1	...	1	1	1 0 0	1	...	1	1	3 0 0
Total ...	458	...	337	20,655	22,264 9 6	410	...	337	20,655	22,264 9 6

(3) *Pargana Madhogarh.*

Caste.	Proprietors Transferees.					Transferees.				
	Number.	Whole mahals and villages.	Fractional shares.	Area.	Revenue paid.	Number.	Whole mahals and villages.	Fractional shares.	Area.	Revenue paid.
1	2	3	4	5	6	7	8	9	10	11
					Rs. a. p.					Rs. a. p.
Thakur ...	220	...	141	5,621	6,765 0 0	156	...	128	4,974	5,654 0 0
Bráhmán ...	305	...	209	4,712	6,004 0 0	205	...	186	5,208	6,570 0 0
Bania ...	2	...	5	462	541 0 0	14	...	14	1,220	1,329 0 0
Gújar ...	13	...	12	1,130	1,212 0 0	18	...	15	536	724 0 0
Kaisth ...	13	...	13	889	733 0 0	16	...	19	703	897 0 0
Lodhi ...	6	...	5	156	147 0 0	...	...	...	...	...
Marwári ...	4	...	4	327	492 0 0	18	...	23	1,155	1,429 0 0
Ahír ...	13	...	9	763	1,201 0 0	7	...	6	334	534 0 0
Kori ...	7	...	7	332	414 0 0	9	...	9	205	282 0 0
Lohár ...	...	...	...	...	...	1	...	1	4	8 0 0
Musalmán ...	2	...	2	28	34 0 0	...	...	...	...	...
Kalár ...	1	...	1	166	195 0 0	1	...	3	166	195 0 0
Tawaif ...	1	...	1	18	24 0 0	...	...	...	...	...
Mochi ...	...	...	...	...	...	6	...	5	134	140 0 0
Total ...	587	...	409	14,634	17,762 0 0	451	...	409	14,634	17,762 0 0

(4) *Pargana Kinch.*

Caste.	Proprietors Transferees.					Transferees.				
	Number.	Whole mahals or villages.	Fractional shares.	Area.	Revenue paid.	Number.	Whole mahals or villages.	Fractional shares.	Area.	Revenue paid.
1	2	3	4	5	6	7	8	9	10	11
					Rs. a. p.					Rs. a. p.
Bráhmán ...	16	...	13	883	521 15 4	21	...	19	1,344	1,259 11 3
Thakur ...	8	...	7	358	506 6 3	5	...	4	178	272 3 6
Kaisth ...	...	...	...	...	...	5	...	5	365	481 5 8
Bania ...	2	...	2	79	90 0 9	16	...	13	457	600 14 7
Goshaín ...	1	...	1	7	7 9 0	...	...	...	...	...
Marwári ...	5	...	3	235	215 12 6	59	1	48	2,798	2,889 9 3
Ahír ...	29	...	17	1,968	893 4 0	7	...	6	1,149	359 0 8
Gújar ...	94	...	62	3,605	3,915 1 2	17	1	20	1,293	1,012 12 8
Kúrmí ...	30	...	18	1,090	1,121 12 11	11	...	8	586	280 5 1
Kánora ...	1	...	1	83	78 3 0	1	...	1	83	78 3 0
Teli ...	...	...	...	...	...	1	...	1	63	120 12 10
Musalmán ...	6	...	1	43	65 4 0	...	...	...	...	...
Bihna ...	1	...	1	36	60 6 5	1	...	1	71	120 12 10
Total ...	193	2	126	8,387	7,475 11 4	144	2	126	8,387	7,475 11 4

## (5) Pargana Kálpi.

Caste.	Proprietors Transferers.					Transferees.				
	Number.	Whole maháls and villages.	Fractional shares.	Area.	Revenue paid.	Number.	Whole maháls and villages.	Fractional shares.	Area.	Revenue paid.
1	2	3	4	5	6	7	8	9	10	11
					Rs. a. p.					Rs. a. p.
Bráhmaṇ ...	102	1	80	7,302	3,932 0 0	208	2	168	12,073	7,243 0 0
Thákur ...	366	2	248	18,505	11,634 0 0	179	...	147	8,732	4,997 0 0
Marwári ...	17	1	3	1,944	1,902 0 0	37	1	37	4,570	3,074 0 0
Bania ...	4	...	4	517	256 0 0	89	...	32	2,835	2,134 0 0
Pandit Dakhni ...	1	...	1	37	69 0 0	...	...	...	...	...
Khatri ...	12	...	12	651	102 0 0	5	...	5	831	207 0 0
Kaisth ...	24	...	23	1,053	540 0 0	25	...	21	1,347	1,173 0 0
Bhurji ...	1	...	1	11	9 0 0	...	...	...	...	...
Kalár ...	...	...	...	...	...	3	...	3	56	94 0 0
Chhipa ...	...	...	...	...	...	1	...	1	27	18 0 0
Kúrmí ...	9	...	9	143	165 0 0	1	...	1	58	21 0 0
Gújar ...	19	...	19	1,722	1,031 0 0	2	...	2	548	232 0 0
Lodhi ...	52	...	52	2,508	1,362 0 0	10	...	9	238	134 0 0
Ahir ...	7	...	5	407	285 0 0	5	...	5	199	79 0 0
Darzi ...	2	...	2	39	21 0 0	2	...	2	57	37 0 0
Goshain ...	2	...	2	104	131 0 0	9	1	5	1,012	836 0 0
Musalmán ...	24	...	17	6,510	1,941 0 0	40	...	40	8,957	2,501 0 0
Total ...	642	4	478	41,540	23,380 0 0	566	4	478	41,540	23,380 0 0

43. The mortgages of the past twenty years which are still extant will appear from the following abstract. The consideration money is left out of account, because it is commonly exaggerated and is unduly swelled out by usurious interest.

Mortgages.

Pargana.				Number of mortgages.	Whole maháls or villages.	Fractional shares.	Area.	Revenue.
							Rs.	Rs.
Jalaun ...	...	...	...	26	...	20	923	1,497
Orai ...	...	...	...	691	3	506	15,547	15,912
Madhogarh ...	...	...	...	36	...	28	725	762
Kunch ...	...	...	...	260	...	184	8,258	8,537
Kálpi ...	...	...	...	621	...	380	17,362	15,551
Total				1,613	3	1,118	42,815	42,250

44. The subjoined table exhibits the tenures. Under each kind of tenure is shown the number of maháls belonging to it with the total of sharers, of area and of revenue. These tenures were fully described in paragraphs 109 to 112 of the district memoir appended to the Kálpi Final Report, dated 30th April, 1874.

Tenures.

Pargana.	Kind of tenure.															
	Zamindári.				Perfect pattidári.				Imperfect pattidári.				Bhaiya chára.			
	Total of sharers.	Number of maháls.	Area.	Revenue thereon.	Total of sharers.	Number of maháls.	Area.	Revenue thereon.	Total of sharers.	Number of maháls.	Area.	Revenue thereon.	Total of sharers.	Number of maháls.	Area.	Revenue thereon.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Jalaun ...	507	124	70,269	91,021	644	30	7,413	13,126	3,741	149	100,926	1,31,940	...	...	...	...
Orai ...	678	87	45,890	39,115	2	1	312	619	2,496	108	142,381	1,68,183	11	4	10,491	10,239
Madhogarh ...	1,334	63	35,320	39,123	...	...	...	...	4,436	123	78,226	97,852	...	...	...	...
Kunch ...	110	32	17,359	12,302	17	2	475	520	1,242	56	48,015	53,281	...	...	...	...
Kálpi ...	537	70	39,948	18,016	71	2	1,242	1,187	3,637	105	121,504	82,096	319	9	6,406	4,571
Total ...	3,066	356	208,786	1,90,582	734	35	9,442	15,482	15,552	546	491,052	5,34,352	330	13	16,897	14,811

Population.

45. The population of the Jalaun tract under report is shown in the following statement; it amounts to 279,346, of which rather more than half, or 155,292, are agriculturists. The population is scanty, being only 246 to the square mile. The Hindus are very strong in number, filling up the whole population with the exception of 12,663, which count to the Musalmáns. Separating Hindus into the higher and lower castes, there are 86,435 in the former and no less than 180,242 in the latter.

Pargana.	Number of compounds.	Number of houses.	Agriculturist.					Non-agriculturist.					Total of columns 8 and 13.
			Male.		Female.		Total.	Male.		Female.		Total.	
			Man.	Boy.	Woman.	Girl.		Man.	Boy.	Woman.	Girl.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Jalaun ... ..	14,797	18,963	14,663	8,768	13,953	6,589	43,973	13,282	8,223	13,179	6,508	41,142	85,115
Orai ... ..	12,943	17,752	10,963	5,515	9,120	4,477	29,184	11,700	7,134	11,867	5,197	36,198	65,382
Madhogarh ... ..	7,813	11,035	14,104	7,386	12,213	6,252	40,285	5,407	3,128	4,910	2,971	16,416	56,701
Kunch ... ..	3,876	5,101	4,657	3,005	4,227	2,545	14,131	2,916	1,988	2,941	1,589	9,434	23,868
Kālpi ... ..	7,791	9,839	5,011	5,639	8,232	4,534	27,416	6,138	4,225	6,530	3,674	20,564	48,280
Grand Total ...	46,950	62,690	52,498	30,613	47,781	24,397	155,292	39,690	24,698	30,427	20,239	124,054	279,346

Farming stock.

46. The farming stock, and cows, sheep, goats, &c., are given in the subjoined statement :—

Pargana.	Number of plough (all).	Number of harrows (bakhar).	Number of kolius (sugar mills).	Milch cows.	Bullocks.	Buffalo cows.	Bull buffaloes.	Horses.	Sheep.	Goats.	Asses.	Camels.	Mules.	Total.
Jalaun ...	6,606	5,691	341	9,434	16,893	10,209	1,216	2,055	3,117	7,787	1,499	45	100	52,375
Orai ...	5,810	5,810	254	13,682	16,030	5,251	827	1,319	4,686	8,683	1,283	84	53	51,878
Madhogarh ...	4,961	4,168	313	6,721	11,479	7,035	874	1,203	2,580	6,273	760	15	12	37,012
Kunch ...	2,190	2,165	85	5,311	5,228	3,669	311	553	3,304	1,415	513	20	...	23,354
Kálpi ...	4,715	4,715	174	13,306	11,024	6,888	923	1,160	6,124	9,227	387	15	9	52,063
Total ...	24,072	22,547	1,200	43,474	63,654	33,052	4,151	6,380	19,811	36,415	4,442	139	174	216,712

Progress and completion of the settlement.

47. The Jalaun tract was declared under settlement by Government Notification No. <sup>1551</sup>/<sub>1-16-84</sub>, dated 24th December, 1884. Half the Bundelkhand cold season had thus passed. In April, 1885, I was appointed Settlement Officer, but I was not relieved of the Deputy Commissionership until September, 1885. I reported the new assessments of parganas Jalaun and Orai and got the sanction of the Board of Revenue in time for their realization from the first kharif kist of 1294 fasli, or November, 1886. The new assessments of the remaining three parganas, Madhogarh, Kunch and Kálpi, were reported and sanctioned in time for collection with the first kharif instalment of 1295 fasli, or November, 1887. All assessment work of the five parganas had actually ended by August, 1887, and on the 30th September, 1887, I gave up the post of Settlement Officer. On 1st October of that year I resumed charge of the Jalaun district as Deputy Commissioner, still retaining settlement powers. The settlement office finally closed on 31st March, 1888, by which date all the records were completed and the misls for sadr, tahsil and patwáris were compiled, bound and filed.

Cost of settlement.

48. The gross cost of this revision was Rs. 1,59,434, against an aggregate budget sanction of Rs. 2,09,605. The total settlement charges against the year

1884-85 were Rs. 9,092-10-7, but regular settlement operations only occupied the last four months of it; the other eight months were devoted to work connected with the resumed muáfis. Then—

							Rs.	a.	p.
Expenditure of 1884-85, equal to 1/3rd of Rs. 9,092-10-7	...	...	...	...	...	...	3,080	14	2
Ditto 1885-86	...	...	...	...	...	...	51,423	14	8
Ditto 1886-87	...	...	...	...	...	...	61,745	6	8
Ditto 1888-88	...	...	...	...	...	...	42,033	11	2
Total							1,58,233	14	8
<i>Add</i> —Deputation allowance sanctioned to Settlement Officer by G. O. No. 1686—11-313A.3, dated 4th May, 1888.							1,200	0	0
							1,59,433	14	8
<i>Deduct</i> —Cost of settlement tents transferred							1,828	0	0
Actual cost of settlement							1,57,605	14	8

Thus the cost per square mile was Rs. 138-13-9, and per acre of the culturable area Rs. 0-4-4.

49. The duration of the new settlement has now to be determined. The tenor of the whole correspondence on the subject of the revision shows that the term generally favored was twenty years, and that is practically the period I beg to recommend. The landlords' engagements for the new revenue have variously been taken from the instalments of November, 1886, and November, 1887, but I would make the settlement of the whole Jalaun tract terminable on the 30th June, 1907 A.D., or twenty years (agricultural) from the latter date. The existing settlement of the regulation Kunch and Kalpi tract will end on 30th June, 1903, or four years earlier. It may be found convenient when the hour comes to let this settlement also run on to 1907 A.D., so as to take up the next re-settlement of the district as a whole at one and the same time instead of revising the revenue of existing parganas in broken parts, as has hitherto been done.

Proposed duration  
new settlement.

50. I think the time has come to remedy the inconvenience of having the district called by a name which is not that of its headquarters. The civil station is at Orai, but the district is named after the town of Jalaun, which is daily decaying and has lost whatever native grandeur it had as the capital of the former Dakhani Paudit chiefs of the country. Jalaun is falling away, Orai is gaining in importance. The Indian Midland Railway passes through Orai, and does not touch Jalaun. I may add that by the present naming one provoking mistake is not infrequently made. The Deputy Commissioner is at Orai, but official covers are commonly addressed to the Deputy Commissioner, Jalaun, which the Post Office sorters sometimes choose to read Deputy Commissioner, Jhilmam, and so the covers go off on a long and useless journey to the Panjab. Territorially the right of Jalaun to give its name to the district is no longer strong. Most of the lands composing it no doubt came to us from the Jalaun chief; but Jalaun was the seat of the chiefs and is not ours, and the place has now sunk into insignificance. The Jalaun district has seen strange vicissitudes, having alternately grown and shrunk in a notable manner. In paras. 135-149 of my report of 1874 I gave a detailed account of the origin, progress, and formation of the district. Pargana Kunch was acquired in A.D. 1805 from Holkar, and pargana Kalpi in 1806 from the Jalaun chief; both were included in the Hamirpur district until 1853. In 1838 parganas Jalaun, Orai, Ata and Mahoba were acquired from the Jalaun chief, and pargana Moth from the Peshwa, when the Jalaun district came into being. It was enlarged by the Chirgaon jagir confiscated from Rao Bakht Singh in 1841; again by parganas Daboh and Garotha, ceded by the Jhansi chief in 1843; again by parganas Madhogarh, Indurkhi and Bhauder, ceded by Sindia in 1844; and finally by

Change of name of district



pargana Jaitpur, oschoated in 1849. The district was now hugely overgrown and began to be disintegrated in 1853, in which year it gave up Mahoba and Jaitpur to the Hamirpur district, receiving, however, parganas Kunch and Kalpi in lieu. In 1854-56 Jalaun helped to consolidate the newly formed Jhansi district by transferring to it parganas Moth, Garotha and Bhandar and the Jagir of Chirgaon. And in 1861 the Government of India gave back to Sindia all his parganas above named which lay to the westward of the river Pahuj. This left the district composed of parganas Orai, Jalaun, Madhogarh, Kunch and Kalpi (Atta) as now. From an administrative point of view I consider it very desirable to call this the Orai District in future.

Notices of subordinates.

51. Maulvi Abdul Hamid, Deputy Collector, with powers of Assistant Settlement Officer, was attached to the settlement office from its commencement to its close. He is an officer of great merit, indofatigable, active, clever and hardworking. He was of the greatest help to me. He has been at the head of the district patwari school since its formation; and except some 30 patwaris, with a few others, who have been exempted by reason of age and long service, all have now been passed through the school curriculum and obtained certificates of qualification. The beneficial consequences of this important training of patwaris will doubtless be apparant in the more complete and correct preparation of the invaluable village papers. Thakur Ganesh Singh, Officiating Deputy Collector, joined in December, 1885, and after nine months' stay was transferred to Bulandshahr. He was new to settlement work, but his knowledge of English was useful. He was an active horseman, worked industriously and succeeded in giving satisfaction. I must also ask leave to say a word in favor of my English head clerk, Muhammad Nur-ullah. A great amount of labor devolved on him, and he proved himself as efficient as painstaking. He is now the Judicial Superintendent of the Deputy Commissioner's Court; but his English and Vernacular attainments, as well as his perfect trustworthiness, mark him out for employment in a better sphere. He has been nominated for a tahsildarship. Colonel John Liston, under whom he served before he came to this district, gave Muhammad Nur-ullah an equally high character.

I have the honor to be,

SIR,

Your most obedient servant,

PHILIP WHITE,

*Dy. Commr. and late Settl. Officer, Jalaun.*

## APPENDIX I.

Area, rent, revenue and incidence of parganas in respect of the Jalaua Tract (para. 14).

Pargana.	1	Soil percentages (cultivated area).										Total cultivated area.	Whole cultivated area.	Assessable rent-roll.	Standard rent-roll.	Revenue of last year of last settlement.	New revenue inclusive of resumed units.	Increase in revenue.		Incidence on cultivation per acre.
		Revenue-free.					Total.											Amount.	Rate per cent.	
		a.	b.	c.	d.	e.	Mar.	Khar.	Paras.	Rakar.	Total.									
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Jalaun ...	...	178,608	12,664	4,563	40-34	20-20	27-01	3-45	100	138,077	161,362	4,74,132	4,83,952	1,96,208	2,36,087	39,870	20-32	Rs. a. p. 1 11 1		
Orai ...	...	199,074	42,887	1,142	51-53	20-23	19-35	8-69	100	118,282	155,045	4,39,108	4,50,658	1,60,819	2,18,186	48,367	28-48	1 13 6		
Madhogarh ...	...	113,546	19,003	1,195	15-12	31-39	49-43	5-06	100	80,198	93,348	2,71,121	2,60,537	1,13,507	1,27,080	14,473	12-75	1 9 3		
Kunch ...	...	65,849	19,045	759	30-57	47-88	12-19	9-36	100	38,670	46,045	1,36,362	1,35,818	52,887	66,103	13,216	24-99	1 11 5		
Kalpi ...	...	160,100	44,973	697	24-56	27-33	34-01	14-10	100	90,957	123,430	2,25,661	2,20,355	96,053	1,05,873	9,820	10-22	1 2 7		
Total	...	726,177	138,572	8,355	34-94	28-49	28-89	7-08	100	465,984	570,350	15,48,387	15,72,320	6,28,474	7,54,229	1,25,755	20-01	1 9 8		

PHILIP WHITE,

Dy. Commr. and late Settlement Officer.

# APPENDIX II.

*Pargana aggregate consolidated Assessment Statement of mahals 949, in villages 690, parganas 5, zila Jalau.*

I.—Comparison of Areas.																	
Period.		Not assessable.					Assessable.					Amount and incidence of revenue on cultivation.					
		Total area in acres.	Revenue-free.	Site.	Occupied by water.	Barren waste.	Total.	Groves.	Out of cultivation.			Total assessable.	Amount.	Incidence.			
									Old cultivable waste.	New fallow.	Irrigated (wells).				Dry.	Total cultivated.	
Last Settlement ... ..		726,749	19,193	9,210	1,713	135,909	166,030	9,605	64,969	19,787	17,914	447,914	465,858	500,219	Rs.	Rs. a. p.	
Present Settlement ... ..		726,177	8,355	7,370	16,179	115,028	146,927	7,897	84,109	21,200	12,756	453,228	465,984	579,250	7,54,229	1	9
(a) Under assessment now ... ..		717,010	8,335	7,370	16,173	115,004	166,402	7,865	83,787	21,083	12,728	445,245	457,973	570,708	7,40,388	...	...
(b) Resumed muiffs already assessed under G. O. No. 2266, dated 25th October, 1883, para. 3.		8,567	...	...	6	19	25	32	322	177	28	7,983	...	8,542	13,801	...	...
III.—Details of cultivated area.																	
II.—Past settlements.		Remarks.		Class of soil.		Irrigated (wells).		Dry.		Total.							
Number.	Period.	Jama.	Rs.	...	...	...	...	...	...	...	...						
1	1 year ...	4,72,015	1840	...	...	...	...	...	...	...	218	...	...	...	218	...	
2	5 do. ...	5,96,724	1841-45	...	...	...	...	...	...	...	2,474	...	...	460	2,934	...	
3	5 do. ...	6,30,876	1845-50	...	...	...	...	...	...	...	3,529	...	...	153,224	156,753	...	
4	5 do. ...	6,56,319	1851-55-62	...	...	...	...	...	...	...	1,512	...	...	128,900	130,472	...	
5	20 do. ...	6,16,519	1863-83	...	...	...	...	...	...	...	4,854	...	...	127,537	132,391	...	
	...	6,26,515	Revised in 1868	...	...	...	...	...	...	...	141	...	...	35,064	35,205	...	
											Total			445,245	457,973	...	

\* This figure includes nominal assessments also.

Pargana aggregate consolidated Assessment Statement of mahals 949 in villages 690, parganas 5, zila Jalain—(continued).

IV.—Details of holdings and rentals.										V.—Corrected rental.		
Description.	No. of holders.	Area.	Rent.	Rs. a. p.	Average holding.	Under tenants.		Heads.	Amount.			
						Area.	Rent.					
Sir	8,676	99,071	2,19,177	2 3 5	11	16,242	65,610	Rent paid by <i>bond fide</i> tenants	Rs. 9,73,602			
Khuddakhat	5,497	64,468	1,87,320	2 14 6	12	...	...	Sir and other land at nominal rents valued at average tenant rate	6,37,898			
Privileged tenants...	1,135	5,425	11,042	2 0 7	5	822	3,809	Gardens ...	1,309			
Ex-proprietary tenants	194	2,074	5,598	2 11 2	11	362	1,444	Miscellaneous	4,920			
Land held by resident tenants with occupancy rights.	11,847	75,102	2,55,723	3 6 6	6	7,119	27,410	Wood ...	20			
Land held by non-resident ditto	4,611	27,475	87,344	3 2 10	6	2,750	10,996	Weightment fee ...	4,158			
Ditto resident tenants-at-will	19,978	110,699	3,98,590	3 9 7	6	2,639	10,614	Singhara...	742			
Ditto non-resident ditto	10,916	61,832	2,26,347	3 10 7	6	1,882	7,761	Total	16,17,720			
Muafi and jagir land granted by zamindars.	5,421	11,827	17,618	1 7 10	2	3,174	9,917					
Total	88,275	457,973	14,08,768	3 1 3	7	31,994	1,37,561					

N. B.—The average holdings of tenants are not correct, because it is obvious that in a table like this which practically embraces the whole district tenants have been counted at least twice over in respect of the paid or non-resident tenancy. A more correct average will therefore be found by adding together both resident and non-resident tenancy of the same class and dividing only by the number of resident tenants of that class.

N. B.—The average holdings of tenants are not correct, because it is obvious that in a table like this which practically embraces the whole district tenants have been counted at least twice over in respect of the pahi or non-resident tenancy. A more correct average will therefore be found by adding together both resident and non-resident tenancy of the same class and dividing only by the number of resident tenants of that class.

VI.—Proprietors.						
Tenure.	Thoks.		Patis.		Caste of proprietors.	
	Fraction.	Area in acres.	Number.	Fraction.	Resident.	Non-resident.
Total					Total	...

\* From this number the non-residents as being reduplications of tenants already elsewhere counted as residents should be deducted. Then 68,275—4,611—10,916=52,748, which is the more correct number of cultivators, raising the average holding to 868 acres.



*Pargana aggregate consolidated Assessment Statement of mahle 949, in villages 690, parganas 5, zila Jalaun—(concluded).*

IX.—Circle standard soil rates.						
1	2	3	4	5	6	7
Class of estate.	Soil.	Acres.	Standard rates.	Deducted rental.	Deduct allowance of 25 per cent. on proportional sir assets.	Net assessable assets from standard rates.
Whole district Jalaun	Már	159,779	Rs. a. p. 4 11 9	Rs. 7,56,142	Rs. 36,827	Rs. 7,19,315
	Kábar	130,556	3 7 5	4,52,107	20,264	4,31,843
	Parwa	132,391	2 14 5	3,83,955	17,427	3,66,528
	Rákar	35,247	1 9 11	57,102	2,408	54,634
	Total	457,973	...	16,49,306	76,986	15,72,320

X.—Amended Table VIII, vide Board's No. 61 dated 1st February, 1897, to address of Commissioner, Jhansi Division.

Soil.	Tenants' cultivation.			Sir sublet to sub-tenants.			Sir self-cultivated.			Khaddáshí rent free and nominal.		Total.		Remarks.
	Acres.	Recorded rent.	Rent-rate.	Acres.	Recorded rent.	Rent by rate of column 4.	Acres.	Less 25 per cent.	Rent by rate of column 4.	Acres.	Rent by rate of column 4.	Assessable rental assets (sum of columns 3, 6, 9 and 11).		
		Rs.	Rs. a. p.		Rs.			Rs.					Rs.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Tir	152	1,453	9 8 11	34	327	8	76	57	24	229	218	2,036		
Cachbar	1,619	7,176	4 5 8	141	773	429	1,863	1,398	715	3,026	2,934	12,373		
Már	92,827	4,27,081	4 9 7	5,661	27,471	30,640	1,40,564	1,05,512	27,925	1,28,737	156,753	6,88,861		
Kábar	79,131	2,69,250	3 6 2	4,752	18,088	22,929	77,030	57,797	23,650	73,739	130,472	9,23,864		
Parwa	82,308	2,35,885	2 13 10	4,935	17,433	23,205	67,310	50,481	21,853	62,598	132,391	3,66,327		
Rakar	21,025	33,759	1 9 8	719	1,518	5,618	9,278	6,971	7,813	12,648	33,205	54,896		
Total	277,182	9,73,604	3 8 2	16,242	65,610	82,529	2,96,121	2,22,206	81,720	2,83,967	4,57,973	15,48,387		
												3-6-1		
												4-0-8		

PULLIP WHITE,  
Dy. Commr. and late Settlement Officer.

## APPENDIX III.

*Memorandum on the Betwa Canal.*

THE Betwa Canal originates from the Betwa river at a village named Khurd, belonging to the jāgīrdāri of Tori Fatehpur. The site of the weir which controls the supply for the canal is situated one mile off the metalled road from Cawnpore to Jhānsi, at a distance of 14 miles from the latter cantonment. The main canal runs  $19\frac{1}{2}$  miles in a north-easterly direction, and then divides into two branches, known as the Kathaund and Hamīrpur respectively. The former for 50 miles runs on a watershed between the Pahuj and the main central drainage system of the Jalaun district, and after that on a minor watershed parallel to the river Jumna. After a course of  $65\frac{1}{2}$  miles it falls into some ravines near the village of Randhirpur, in the Jalaun pargana, leading down to the Jumna. The latter follows the watershed between the river Betwa and the central drainage system mentioned before, and after a course of 83 miles sends its surplus water back into the Betwa through some ravines, about 5 miles away from the station of Hamīrpur. During its course the canal passes through the native states of Datia and Samthar and the minor ones of Baoni, Beri, Gopalpur, Rampur and Jagammanpur. The three districts under British rule traversed are Jhānsi, Jalaun and Hamīrpur. A large portion of the canal as regards length lies in the Jalaun district, as also most of the distributaries, so that the chief irrigation effected from the canal is also in that district. Moreover, any extensions of minor distributing channels likely to be carried out will occur in the same district.

The main canal runs either through native states or the Jhānsi district. Of the total length of the Kathaund branch, viz.,  $65\frac{1}{2}$  miles, no less than 43 miles lie in Jalaun, and of the 83 miles of the Hamīrpur branch 44 miles lie also in Jalaun.

There are at present 320 miles of distributaries finished or under construction, and, with the exception of 22 miles, all the above lie in the Jalaun district. A certain amount of irrigation is carried on direct from the branches; but as no outlets are allowed on the upper 31 miles of the Kathaund and the upper 31 of the Hamīrpur branch, practically all direct irrigation is also in the Jalaun district. A list is attached, giving the names of all distributaries and their length in miles. It is also noted from which branch they originate. A statement is annexed, showing the areas of the various soils commanded in each village arranged according to parganas. Of course this is the ultimate prospect. Up to date the progress has been as follows:—

Rabi of 1885-86	= 228 villages in Jalaun received water.	
Kharif of 1886-87	= 168	ditto ditto.
Rabi of 1886-87	= 209	ditto ditto.
Kharif of 1887-88	= 183	ditto ditto.
Rabi of 1887-88	= 365	ditto ditto.

The area irrigated has been as follows:—

Rabi of 1885-86	= 12166 acres (in Jalaun).
Kharif and rabi of 1886-87	= 8,606 acres (in Jalaun).
Ditto 1887-88	= 21,011 acres (ditto).

Thus showing that in its third year the canal has doubled the area of its first season. The revenue from water rates obtained has been as follows:—

	Rs.
1885-86 (rabi only)	= 13,612 (in Jalaun).
1886-87 (kharif and rabi)	= 20,780 (ditto).
1887-88 ditto	= 63,597 (ditto).

In other words, the revenue last obtained was almost five times as great as that of the first season.

A table is given, showing the areas obtained and the revenue earned on the whole canal during the period reviewed above, from which it will be seen how large a share belongs to the Jalaun district. The canal was first opened in September, 1885, in time for the *paleo* watering of the rabi of 1885-86. Viewed in the light of the figures quoted above, the results may be considered satisfactory.

In addition to the regular water rates, there are also certain sources of miscellaneous revenue, such as sales of grass on canal banks, sale of water for filling tanks, making mud walls, &c.

Taking all these items into consideration, the revenue for the past three years has been as follows :—

							Rs.
1885-86	...	...	...	...	...	...	= 13,794
1886-87	...	...	...	...	...	...	= 23,157
1887-88	...	...	...	...	...	...	= 66,170

According to a forecast made some time back, it was anticipated that the receipts would have been as follows :—

							Rs.
1885-86	...	...	...	...	...	...	= 30,000
1886-87	...	...	...	...	...	...	= 70,000
1887-88	...	...	...	...	...	...	= 1,35,000
and in 1896-97	...	...	...	...	...	...	= 3,00,000

with an irrigated area of 100,000 acres.

Judging from the experience of the past two years, it seems probable that the kharif area will not exceed 12,000 acres and the rabi area will perhaps not be more than 50,000 acres in the near future. The average rate obtained per acre in the kharif of 1887-88 was Rs. 5·3 per acre and that of the rabi Rs. 2·35 per acre. This would yield a revenue of—

							Rs.
12,000 × 5·3	...	...	...	...	...	...	= 63,600
50,000 × 2·35	...	...	...	...	...	...	= 1,17,500
Total							1,81,100

The revenue charges should not exceed Rs. 75,000, so that the surplus revenue obtained from the canal should be over one lakh of rupees per annum within the next few years.

For the rabi harvest the supply in the river is ample, as there is water escaping over the weir till the end of March. The difficulty arises in the early kharif. The water used is drawn entirely from the reservoir which goes on diminishing. The experience of the summers of 1887 and 1888 has gone to show that a supply of about 200 cubic feet per second can be given till the end of June without exhausting the reserve. The reservoir when full is 21½ feet above canal head floor. The lowest 6½ feet of this is almost useless, as there would be no head of pressure on the water entering the canal, therefore some 15 feet in depth are available. In 1887 the depth of water used was 11·2 feet and in 1888 11·4 feet, and in the present year a supply had to be maintained till the 2nd of July. The areas of kharif\*

			Aeres.
*1886-87	...	...	= 2,677
1887-88	...	...	= 2,290
1888-89	...	...	= 3,450

irrigation obtained to date do not show what could be done with the water used. The irrigated tracts in the kharif are scattered and the style of irrigation has necessarily been wasteful; but a liberal allowance has always been given, so that the cultivators may acquire confidence in the resources of the canal. It is a matter of regret that water can be given to the Kathaund branch alone during the early kharif. But if another reservoir is established above the existing one, a much larger kharif area will be obtained. The area obtainable in the rabi depends largely on the date when the monsoon closes.



If the rains cease early in September, the cultivators must take water for the *paleo* or preparatory watering in *kábar* and *parwa* soils. If rain falls late in the season, the canal at once loses that prospective area. The area due to *paleo* last rabi was 4,000 acres. There is a special rate on this canal for fields only *paleo* and not watered again. The greatest advance made in irrigation has been the extension of sugarcane.

In 1886-87 the area was 993 acres, in 1887-88 the area was 1,665 acres, and the latest reported area of the present year, 1888-89, is 2,540 acres. This shows steady growth, and as sugarcane is a first class crop, paying Rs. 6-10-8 per acre for flush irrigation, it is greatly to be encouraged. It is a crop, moreover, that can never usually be spoilt by rain, and the yield up to date has been satisfactory, so that it is hoped the cultivators will be encouraged to extend its area. Indigo has also been introduced: the acreage obtained in 1886-87 was only 94 acres, in 1887-88 353 acres, and in the present season as last reported 669 acres. This is a crop which should not be much encouraged, as it does not benefit the populace in the same way as sugarcane or food grains would. The progress in rice cultivation (in 1886-87=3 acres, in 1887-88=9 acres, and as last reported for this season 13 acres) is not as great as might be expected. The soil, which is rich and retentive of moisture, seems most admirably suited to the cultivation of this crop, and even if the rains failed, the canal would still be able to protect this valuable product. The reason for this statement is well grounded. The Betwa river rises in the Vindhya hills, and even in what have been known as years of scanty rainfall the Betwa has never hitherto failed to yield a monsoon supply. With the weir at Paricha a most scanty fall of rain in the region of Bhopal brings us back to the condition of a full reservoir at the lowest computation, which alone would enable the canal to assure a good supply. While if there were sufficient flood water to pass over the crest of the weir continuously, be it remembered that a few inches in depth passing over the weir means a supply greater than the canal can carry. The position then is this; if cultivators can be induced to extend rice cultivation and if they are able to bring the crop to maturity without the use of canal water, their gain will be enormous, and even if they have to use canal water and pay for it, they are still infinitely better off than before. They should be urged, by every reasonable means and in their own interests, to extend rice cultivation.

Feelings of the cultivators.

In many places, especially in the *parwa* tracts of Madhogarh and towards Kathaund, the cultivators have availed themselves readily of canal irrigation. Their soil was good, and they had also, from intercourse with people living across the *Junina*, seen the benefits of irrigation as practised on the *Bhogpur* and *Etawah* branches of the Lower Ganges Canal. In other places there has been a feeling of apathy or of marked caution. Many cultivators would only water, say, one field out of six to see what the result would be. In many cases canal water when used has been applied so lavishly that more harm than good was the result: in such cases the canal water was said to be noxious. Time of course will correct many of these ideas. The canal has only run for three years; matters will be different when it has run for 23 years. One fact which seems to be against any rapid extension of irrigation is the great want of ploughing power. There is a lack of cattle, and those that exist are poor and ill conditioned. The opening of the canal has had a marked effect on the spring level: observations are made monthly on 117 wells, and there is already a decided rise. In a country where the spring level is at a great depth and where many wells fail in the dry season, this rise is a decided advantage. In addition to this the mere presence of flowing water is an inestimable boon to men and cattle, especially in the hot months. It is also to be hoped that the growth of trees will be fostered. The leading chiefs and raises might do much in coming forward and offering to build watering places for cattle and bathing gháts at the site of canal bridges on important roads. As yet no desire to do so has been evinced.

Effect on spring levels.

Drainage cuts and inage.

In a country which possesses such marked natural drainage lines, it would have been almost impossible to align channels incorrectly if any care were exercised. On the whole, the lines have been skilfully laid down, so that the cases of

obstructed drainage are few and far between. Constant observations are made during the rains, and any places brought to light will receive prompt attention. As matters stand, there are only 12 miles of constructed drainage cuts on the whole canal, and of these over six miles are in the Jhānsi district.

The soil used in making banks is extremely bad in places: it is therefore not surprising that some percolation has taken place. This is an evil which is generally remedied by time. All channels tend to provide themselves with puddling material, and so become watertight. To help on the process, the silt laden water of the Betwa during the rains will be passed into the canal and distributaries in future. A beginning was made during the present monsoon, and some good has certainly resulted.

Percolation.

The progress of the canal may not have been very marked as yet, but the prospect seems hopeful.

W. P. VONDER HÖRST,

*Executive Engineer, Betwa Canal Division.*



सत्यमेव जयते

## LIST OF DISTRIBUTARIES.

No.	Name of Works.	Length in		Description.	Remarks.
		Miles.	Fur. feet.		
	Head Works ... ..	...	...	...	Completed.
	Main Canal ... ..	19	2 266	...	Ditto.
	<i>Branches.</i>				
	Hamirpur Branch ... ..	82	6 400	...	Completed.
	Kuthaund Branch ... ..	65	3 0	...	Ditto.
	<i>Distributaries on Hamirpur Branch.</i>				
	Jalaun ... ..	38	...	...	Completed.
	Auda ... ..	5	4 0	...	Ditto.
	Dhantauli ... ..	8	1 0	...	Ditto.
	Kukurgaon ... ..	20	3 0	...	Ditto.
	Nainpur ... ..	5	...	...	Ditto.
	Jagatpur ... ..	5	4 0	...	Ditto.
	Basop ... ..	7	1 0	...	Ditto.
	Jamrohi ... ..	2	6 0	...	Ditto.
	Oral ... ..	12	4 0	...	Ditto.
	Karmer ... ..	6	6 0	...	Ditto.
	Bardar ... ..	3	4 0	...	Ditto.
	Itaura ... ..	18	4 0	...	Ditto.
	Mawai ... ..	11	6 0	...	Ditto.
	Kathpurwa ... ..	4	...	...	Ditto.
	Kalpi ... ..	14	1 338	...	Ditto.
	Ata ... ..	12	...	...	Ditto.
	Bijapur ... ..	3	2 0	...	Ditto.
	Baghi ... ..	1	7 0	...	Under construction.
	Seoni ... ..	12	4 0	...	Completed.
	Kurara ... ..	4	1 0	...	Ditto.
	<i>Distributaries on Kuthaund Branch.</i>				
	Sikri ... ..	21	7 0	...	Completed.
	Gora ... ..	5	3 0	...	Ditto.
	Lona ... ..	2	5 0	...	Ditto.
	Khaksis ... ..	10	1 0	...	Ditto.
	Gopulpur ... ..	6	6 0	...	Ditto.
	Hadrakh ... ..	17	6 0	...	Ditto.
	Bicia ... ..	3	4 0	...	Ditto.
	Sarawan ... ..	9	6 0	...	Completed.
	Kusmar ... ..	8	4 0	...	Under construction.
	Barauli ... ..	3	2 0	...	Ditto.
	Tarsaur ... ..	21	6 0	...	Completed.
	Bijdawá ... ..	6	5 0	...	Ditto.
	Jakha ... ..	4	...	...	Ditto.
	Harsinghpur ... ..	11	...	...	Ditto.
	Wáli ... ..	4	...	...	Ditto.
	Daulatpur ... ..	3	4 0	...	Under construction.
	<i>Escapes on Hamirpur Branch.</i>				
	Punch ... ..	1	...	...	Completed.
	Jaisiri ... ..	2	2 0	...	Ditto.
	Bardar ... ..	1	1 40	...	Ditto.
	Babina ... ..	2	1 0	...	Ditto.
	Seoni ... ..	...	4 0	...	Ditto.
	Deopurá ... ..	...	...	...	Ditto.
	Kharrá ... ..	...	3 423	...	Ditto.
	Bijapur ... ..	...	...	...	Ditto.
	Khunwán ... ..	...	5 0	...	Ditto.
	<i>Escapes on Kuthaund Branch.</i>				
	Kailiá ... ..	1	7 0	...	Completed.
	Kathaunda ... ..	2	...	...	Ditto.
	Tarsaur ... ..	...	6 400	...	Under construction.
	<i>Drainage cut on Main Canal.</i>				
	Chirauna ... ..	5	6 0	...	Completed.
	<i>Drainage cut on Hamirpur Branch.</i>				
	Jakhauli ... ..	3	7 382	...	Completed.
	<i>Drainage cut on Kuthaund Branch.</i>				
	Sikri ... ..	...	3 445	...	Completed.

W. P. VONDER HÖRST,

Executive Engineer, Betwa Canal.

3rd November, 1888.

## LIST OF VILLAGES IRRIGABLE BY THE BETWA CANAL.

Number.	Pargana.	Manza.	Nature of soil.				Total.	Remarks.
			Már.	Kábar.	Parwa.	Others.		
1	Orai	Orai	...	461	567	111	1,139	
2	"	Akohri	584	630	...	...	1,214	
3	"	Ingoi (Khurd)	64	707	188	...	959	
4	"	Air Khás	...	1,571	1,599	102	3,272	
5	"	Iklaspur	2,824	...	...	61	2,885	
6	"	Binaura	584	722	1,850	...	3,156	
7	"	Parasau	1,963	2,092	...	...	4,055	
8	"	Rajibra	2,067	921	345	159	3,492	
9	"	Pirona	400	2,755	1,062	...	4,217	
10	"	Tamron	6,180	4,142	656	...	10,978	
11	"	Tikaria	614	127	60	28	829	
12	"	Tikar	47	902	993	977	2,919	
13	"	Jakhawli	...	1,204	...	2,360	3,564	
14	"	Jaisari (Kalan)	465	3,773	2,540	742	7,520	
15	"	Chak Orui	276	...	...	4	280	
16	"	Chaurasi	1,158	246	294	150	1,848	
17	"	Chilli	3,485	3,399	87	45	7,016	
18	"	Dhurat	2,516	787	154	33	3,490	
19	"	Dhamni	1,832	1,852	1,486	...	5,170	
20	"	Dakor	1,215	1,047	4,127	843	7,232	
21	"	Rampura	...	701	96	24	821	
22	"	Roud Tamron	...	2,308	255	...	2,563	
23	"	Sundhi	58	56	267	...	381	
24	"	Orai	1,560	2,112	775	600	5,047	
25	"	Khadani	176	429	...	53	658	
26	"	Kailari	2,187	262	...	...	2,449	
27	"	Kuthonda	6,233	4,174	904	115	11,426	
28	"	Kharka	1,880	413	118	...	1,911	
29	"	Kolua	5,523	...	...	...	5,523	
30	"	Kusmilia	6,812	3,827	2,870	...	13,509	
31	"	Gurru	32	104	76	...	212	
32	"	Goran	771	2,040	2,235	...	5,046	
33	"	Ladmaura	...	62	104	35	201	
34	"	Mohamadabad	6,530	2,167	1,111	...	8,808	
35	"	Mawai	...	271	147	137	555	
36	"	Mokhri	1,208	98	...	...	1,306	
37	"	Nunbai	16	339	320	532	1,207	
38	"	Hardoi	1,037	113	454	15	1,609	
<i>Pargana Kálpi.</i>								
1	Kálpi	Akohri	1,248	367	1,385	...	3,000	
2	"	Itaura	...	369	1,128	305	1,802	
3	"	Usargaon	302	704	968	369	2,313	
4	"	Akbarpur	...	...	980	941	1,921	
5	"	Ukaa	1,637	362	249	206	2,514	
6	"	Aunta	425	1,067	1,139	23	2,654	
7	"	Ajuara	2,015	814	538	151	3,548	
8	"	Imilia (Buzurg)	...	1,823	854	...	2,677	
9	"	Amisa	...	919	919	...	1,838	
10	"	Itaura	2,119	3,075	1,162	232	6,588	
11	"	Ata	6,966	192	3,419	109	10,676	
12	"	Babina	1,504	1,450	555	...	3,509	
13	"	Bairai	...	239	1,260	140	1,639	
14	"	Bara	74	1,626	863	...	2,563	
15	"	Barkhera	...	159	223	220	602	
16	"	Babai	3,017	635	...	263	3,915	
17	"	Bejapur	843	214	620	...	1,677	
18	"	Bardanli	...	49	259	90	398	
19	"	Bardar	...	445	1,008	...	1,453	
20	"	Bhadreki	276	7	1,418	197	1,898	
21	"	Bamhauri (Kalan)	914	694	1,258	267	3,133	
22	"	Bhabua	1,715	439	1,213	...	3,367	
23	"	Bhitari	425	675	1,449	72	2,621	
24	"	Para	285	134	14	...	433	
25	"	Pipryan	324	2,485	2,626	76	5,511	
26	"	Parasau	551	1,504	2,299	7,032	11,386	
27	"	Tagaripur	11	173	375	...	559	
28	"	Joldupur	56	35	64	56	211	
29	"	Jaurakhera	...	921	710	...	1,631	
30	"	Chamari	5,602	28	428	531	6,589	
31	"	Churkhi	1,501	1,586	298	106	3,491	
32	"	Chatunks	187	1,060	907	561	2,715	
33	"	Charani	4,270	2,357	...	4	6,631	
34	"	Haidulpur	934	25	217	218	1,444	
35	"	Dhamni (Buzurg)	1,832	1,852	1,486	...	5,170	
36	"	Danupura	...	28	258	1,455	1,741	
37	"	Dauras	566	924	1,588	82	3,160	

## List of villages irrigable by the Betwa Canal—(continued).

Number.	Pargana.	Mauza.	Nature of soil.				Total.	Remarks.
			Már.	Kábar.	Parwa.	Others.		
Pargana Kálpi—(concluded).								
38	Kálpi	... Dadri	...	2,774	1,946	922	5,642	
39	"	... Daudpur	...	89	291	92	472	
40	"	... Daunpura	...	153	167	244	564	
41	"	... Rajapur	...	126	283	233	642	
42	"	... Rura	200	1,407	...	2,833	4,440	
43	"	... Rahia	2,197	184	225	48	2,654	
44	"	... Sarauni	64	124	94	2,143	2,431	
45	"	... Sultanpur	1,612	339	...	...	1,951	
46	"	... Sarsola	1,382	293	665	133	2,473	
47	"	... Shalvadpur	865	151	60	87	1,163	
48	"	... Suidpur	839	290	643	22	1,785	
49	"	... Sobhanpur	830	290	643	22	1,785	
50	"	... Sarsela	...	80	75	469	574	
51	"	... Sultanpur (Khurd)	...	19	122	202	343	
52	"	... Sand	4,025	1,623	4,208	...	9,856	
53	"	... Sháhjahánpur	836	1,073	651	86	2,596	
54	"	... Sarsai	2,036	1,949	74	19	4,078	
55	"	... Sohrapur	...	...	227	169	396	
56	"	... Kusmura	...	420	1,384	58	1,812	
57	"	... Khanua	909	178	265	111	863	
58	"	... Khairai	133	589	841	61	1,624	
59	"	... Kutpurwa	118	572	66	...	756	
60	"	... Kurhauralingir	...	2,604	2,080	311	4,995	
61	"	... Kashi Rampur	120	257	428	611	1,416	
62	"	... Karvi (Khurd)	...	570	554	81	1,205	
63	"	... Karvi (Buzurg)	...	1,161	365	49	1,575	
64	"	... Karmer	910	710	4,098	17	5,735	
65	"	... Kandepur	55	40	174	31	300	
66	"	... Gilauli (upland)	310	146	53	743	1,252	
67	"	... Garhganwan	181	156	212	76	625	
68	"	... Gora (Khurd)	...	810	301	...	1,111	
69	"	... Labargaon	...	98	262	926	1,286	
70	"	... Labora	...	693	394	135	1,162	
71	"	... Lehgoopur	...	30	355	49	434	
72	"	... Margyan	495	3,549	417	236	4,697	
73	"	... Matra	...	201	105	268	574	
74	"	... Marayan	...	...	1,283	1,161	2,444	
75	"	... Musgawan	328	1,400	1,796	499	4,023	
76	"	... Manohri	60	116	58	74	317	
77	"	... Nasirpur	1,348	111	242	9	1,710	
78	"	... Nurpur	2,333	124	...	162	2,619	
79	"	... Nadai	670	320	22	...	1,012	
Pargana Jalaun.								
1	Jalaun	... Iton	...	316	2,514	...	2,830	
2	"	... Ugrapur	...	152	349	...	501	
3	"	... Ajetapur	...	...	699	...	699	
4	"	... Alaiapur	11	500	267	...	778	
5	"	... Al	...	36	148	6	190	
6	"	... Ingoi	...	...	100	...	100	
7	"	... Eukon	...	1,330	1,284	...	2,614	
8	"	... Aurekhi	2,748	756	1,045	...	4,549	
9	"	... Attarchhula	259	122	495	7	883	
10	"	... Urganon	13,413	2,764	212	...	16,389	
11	"	... Udh	...	93	149	101	343	
12	"	... Bhitara	4,031	...	...	...	4,031	
13	"	... Bichanli	...	1,037	1,031	...	2,068	
14	"	... Bijonpur	30	157	17	...	204	
15	"	... Bhaopur	...	826	1,130	...	1,456	
16	"	... Biria (Buzurg)	2	414	219	82	717	
17	"	... Bastepur	42	280	291	4	617	
18	"	... Bhadwan	710	574	133	...	1,417	
19	"	... Barela	...	28	537	5	570	
20	"	... Bijapur	...	84	412	1	497	
21	"	... Birpur	5,129	1,100	203	...	6,432	
22	"	... Bhitaria	218	367	18	2	605	
23	"	... Bhojapur	...	55	1,487	...	1,542	
24	"	... Panditpur	...	185	1,073	...	1,258	
25	"	... Paudauri	2,287	245	9	...	2,541	
26	"	... Pataua	...	119	731	14	864	
27	"	... Pipri Gahirwar	...	46	1,501	14	1,561	
28	"	... Parkola	...	168	1,443	...	1,611	
29	"	... Panohra	1,752	348	...	...	2,100	
30	"	... Talakpur	...	...	88	55	143	
31	"	... Tarsour	...	1,200	524	91	1,815	
32	"	... Tanuha	1,404	268	340	5	2,017	
33	"	... Jaipura	1,121	314	159	...	1,594	

## List of villages irrigable by the Betwa Canal—(continued).

Number.	Pargana.	Mauza.	Nature of soil.				Total.	Remarks.
			Már.	Kábar.	Parwa.	Others.		
Pargana Jalaun—(continued).								
34	Jalaun	Jagatpura	614	563	805	...	1,482	
35	"	Jamlapur	58	788	150	...	996	
36	"	Jakha	...	799	2,671	6	3,475	
37	"	Jadgaipur	...	151	357	...	511	
38	"	Jaisingpur	...	181	547	...	728	
39	"	Chhani (Abir)	...	849	1,124	...	1,973	
40	"	Jabtauli	...	220	1,220	...	1,440	
41	"	Chhani (Khás)	5,752	...	...	...	5,752	
42	"	Chaki	1,579	3,795	959	...	6,333	
43	"	Jirgawan	...	2	228	107	337	
44	"	Jamlapur	...	329	214	...	543	
45	"	Jajepura	...	...	188	27	215	
46	"	Dandpur	...	115	263	...	408	
47	"	Donapur	...	415	564	...	979	
48	"	Dhundhakhera	273	497	459	47	1,276	
49	"	Dhamauli	6,648	3,536	1,004	80	11,268	
50	"	Damma	4,204	678	30	...	4,912	
51	"	Dhagwan	1,143	1,351	291	...	2,785	
52	"	Dadunpur	...	119	339	...	458	
53	"	Dhamaura	6,512	2,082	441	110	9,145	
54	"	Rura (Addu)	1,979	763	1,043	...	3,785	
55	"	Roodhipur	...	101	256	...	357	
56	"	Rajpur	...	280	774	285	1,339	
57	"	Rura Jaiteya	...	40	489	...	535	
58	"	Rura Malu	209	2,022	142	297	2,670	
59	"	Raudhipur	...	...	470	97	567	
60	"	Rampur	...	677	1,073	...	1,650	
61	"	Rura Madho	...	125	459	...	584	
62	"	Surajpur	1,149	559	...	...	1,708	
63	"	Surauli	166	645	681	...	1,492	
64	"	Sayapur	342	12	80	11	445	
65	"	Salonpur (Kanar)	...	51	474	23	548	
66	"	Surawan	996	6,025	3,540	...	11,461	
67	"	Sikri	4,471	2,035	91	...	6,597	
68	"	Sonai Parwai	778	177	223	21	1,199	
69	"	Salampur (Kálpi)	...	28	981	...	1,009	
70	"	Sorhar	3,550	1,089	401	38	5,078	
71	"	Sirsu (Kalan)	165	908	2,809	...	3,882	
72	"	Shahzadpur	1,285	1,071	890	709	3,955	
73	"	Saluo	800	532	572	...	1,904	
74	"	Seouri	1,264	900	243	...	2,407	
75	"	Sharepur	811	366	243	...	920	
76	"	Sheikpur	941	679	724	...	2,344	
77	"	Shahzadepur	201	514	115	...	830	
78	"	Salehabad	2,196	2,126	183	391	4,901	
79	"	Abdullapur	...	231	229	...	460	
80	"	Jalaun	562	11	14	...	587	
81	"	Kuthipur	...	115	679	...	794	
82	"	Kharka	...	130	449	...	579	
83	"	Kokargaon	1,275	2,833	539	637	5,284	
84	"	Kuthela	...	...	327	...	327	
85	"	Kathauud	...	713	2,770	...	3,483	
86	"	Kuajuri	854	945	12	...	1,811	
87	"	Kaithwan	967	657	1,237	4	2,865	
88	"	Kotta Mostgal	...	...	349	18	367	
89	"	Khargapur	124	381	33	...	538	
90	"	Kurlaya	...	193	408	10	611	
91	"	Koripura (Kanar)	66	211	628	...	905	
92	"	Khattwa	5,904	...	...	...	5,904	
93	"	Kusumara	4,408	1,391	...	...	5,799	
94	"	Khannau	9,425	8	38	...	9,471	
95	"	Kakta	5,904	...	...	...	5,904	
96	"	Kuanpura	3,670	252	154	...	4,276	
97	"	Karauli	...	83	1,998	...	1,991	
98	"	Kartalapur	442	1,502	375	20	2,339	
99	"	Kharra	3,320	2,969	1,228	42	7,559	
100	"	Karanpur	405	361	31	95	892	
101	"	Katra (Kanar)	...	...	1,026	...	1,026	
102	"	Gaipura	...	...	61	85	146	
103	"	Gurlu Matampur	3,434	375	...	...	3,809	
104	"	Gadhwa	2,505	54	6	...	2,565	
105	"	Gangaura	...	26	1,007	2	1,035	
106	"	Gora Bupka	444	2,157	1,315	72	3,988	
107	"	Gair	4,868	432	...	...	5,300	
108	"	Gulabpur	717	532	32	...	1,281	
109	"	Garu Rathaur	121	...	1,692	...	1,813	
110	"	Labar Jalaun	885	340	9	24	1,258	
111	"	Lona	5,851	544	49	30	6,474	

## List of villages irrigable by the Betwa Canal—(continued).

Number.	Pargana.	Mauza.	Nature of soil.				Total.	Remarks.
			Már.	Kábar.	Parwa.	Others.		
Pargana Jalaun—(concluded).								
112	Jalaun	Lahehoora	2,793	1,718	...	...	4,541	
113	"	Lohari	...	435	509	...	944	
114	"	Malpur	...	...	632	72	704	
115	"	Mahia Kamalpur	538	855	...	...	1,393	
116	"	Mahota	...	31	443	...	474	
117	"	Mahoni	...	...	20	20	40	
118	"	Marora	1,973	1,091	193	...	3,257	
119	"	Marori	2,359	2,570	702	...	5,631	
120	"	Motipur	...	...	1	45	46	
121	"	Madaripur	...	192	1,822	...	2,014	
122	"	Malikpura	219	195	643	...	1,087	
123	"	Mahponli	...	...	966	...	966	
124	"	Makrandpur	110	1,444	412	73	2,039	
125	"	Mahmoodpur	41	760	...	...	801	
126	"	Maukapur	...	573	213	22	808	
127	"	Malupura	254	719	227	...	1,200	
128	"	Nahli	...	182	829	4	1,015	
129	"	Nawasi	...	168	702	24	894	
130	"	Narainpur	2,319	...	...	...	2,319	
131	"	Nizampur	...	17	333	...	350	
132	"	Banthari	1,752	348	...	...	2,100	
133	"	Nainpur	...	1,228	439	30	1,697	
134	"	Waoli	...	...	881	...	881	
135	"	Hadrukhi	2,089	2,078	2,335	283	6,785	
136	"	Halepuri	...	107	694	...	801	
137	"	Hardoi Raja	5,880	179	...	...	6,059	
138	"	Harkbanti	3,734	1,592	305	70	5,701	
139	"	Harsingpur	...	190	1,005	...	1,195	
140	"	Harukka	599	370	275	...	1,214	
141	"	Harokhira	504	853	23	...	1,380	
142	"	Hateri	1,483	203	680	11	2,277	
143	"	Hattapur	...	...	229	...	229	
Pargana Madhogarh.								
1	Madhogarh	Islampur	...	31	1,036	...	1,067	
2	"	Unchon	...	27	742	657	1,426	
3	"	Ankhera	455	3,378	1,417	...	5,250	
4	"	Ingoi	2,427	2,953	127	...	5,507	
5	"	Aiheto	689	570	935	...	2,194	
6	"	Akharpura	...	129	1,470	...	1,599	
7	"	Andhai	...	119	263	41	428	
8	"	Unti	...	...	444	68	512	
9	"	Bahdurpur	...	...	1,878	...	1,878	
10	"	Tajpura	...	...	1,012	425	1,437	
11	"	Badhanpur	...	348	960	...	1,308	
12	"	Bhaga	155	1,197	732	...	2,084	
13	"	Bhagwautpura	645	1,142	44	...	1,831	
14	"	Bhedpura	...	266	7	...	273	
15	"	Bijawan	...	...	3,442	...	3,442	
16	"	Birpura	665	123	262	...	1,050	
17	"	Bangra	5,038	3,040	117	...	8,195	
18	"	Babbelpura	751	864	52	...	1,667	
19	"	Bantheri	...	765	...	...	765	
20	"	Bohra	473	816	430	...	1,719	
21	"	Barauli	704	1,538	23	...	2,265	
22	"	Bachaura	...	...	1,286	...	1,286	
23	"	Birgawan	...	...	655	373	1,008	
24	"	Barauli	...	...	313	27	340	
25	"	Purainpura	...	16	589	...	605	
26	"	Pardhani	646	241	1,065	...	1,952	
27	"	Titra Khalilpur	...	233	110	...	403	
28	"	Torua	1,182	1,601	...	10	2,793	
29	"	Jalaun Khurd	...	...	1,242	138	1,380	
30	"	Jumhpur	...	...	1,314	...	1,314	
31	"	Jagrajpur	1,434	2,396	...	...	3,830	
32	"	Janrehi (Kalan)	...	...	2,109	...	2,109	
33	"	Janrehi (Khurd)	...	509	1,406	...	1,915	
34	"	Jaswarpur	...	...	819	...	819	
35	"	Chandauli	898	584	...	...	1,482	
36	"	Chikra	679	451	272	28	1,430	
37	"	Husepura	...	...	1,088	...	1,088	
38	"	Haidulpur	...	19	427	...	446	
39	"	Hazratpur	...	...	425	...	425	
40	"	Darapur	...	578	56	...	634	
41	"	Dhamrehi	...	...	706	...	706	
42	"	Dhanja	265	60	200	...	525	

## List of villages irrigable by the Betwa Canal—(continued).

Number.	Pargana.	Mauza.	Nature of soil.				Total.	Remarks.
			Már.	Kábar.	Parwa.	Others.		
Pargana Madhogarh—(concluded).								
43	Madhogarh	Channa	...	821	452	...	1,273	
44	"	Delpura	...	...	767	...	767	
45	"	Dakauli	...	...	2,307	...	2,307	
46	"	Deha	1,887	1,019	...	...	2,906	
47	"	Rahauli	...	...	958	...	958	
48	"	Ramanapur	...	...	655	...	655	
49	"	Raipura	...	64	829	...	893	
50	"	Radauli	1,536	1,241	363	378	3,518	
51	"	Rura Jhānsi	...	53	1,100	112	1,265	
52	"	Rudhpura	...	421	4,004	...	4,425	
53	"	Randher	1,553	1,798	1,262	...	4,613	
54	"	Ramnagar	...	179	478	...	657	
55	"	Rupapur	...	175	1,162	...	1,337	
56	"	Rura	...	53	1,100	112	1,265	
57	"	Sarpatpura	...	...	814	...	814	
58	"	Sarai	636	611	...	...	1,247	
59	"	Sirsa	883	2,772	706	...	4,361	
60	"	Sopta	264	1,839	...	...	2,103	
61	"	Singauli	465	246	21	...	732	
62	"	Selawa	...	142	241	217	600	
63	"	Salakhana	681	1,096	46	...	1,823	
64	"	Saltnpur	...	596	1,387	...	1,983	
65	"	Saranli	...	...	953	...	953	
66	"	Sonapur	...	...	723	...	723	
67	"	Shahbazpur	...	383	1,351	...	1,734	
68	"	Alampur	...	...	803	...	803	
69	"	Kasimpur	...	...	1,250	...	1,250	
70	"	Kursendha	...	1,456	1,066	...	3,122	
71	"	Kherabhera	...	370	20	...	390	
72	"	Kartala	...	362	296	...	658	
73	"	Kanjberi	...	41	1,545	38	1,624	
74	"	Khaksis	3,236	752	1,242	...	5,280	
75	"	Keshupur	...	...	842	...	842	
76	"	Kalianpur	750	119	118	...	987	
77	"	Khadrawar	...	1,757	555	...	2,312	
78	"	Khargopur	...	...	527	...	527	
79	"	Kumsera	1,058	3,415	519	...	4,992	
80	"	Kuthonda	978	3,774	164	308	5,224	
81	"	Katra	...	1,056	340	...	1,396	
82	"	Karauti	...	1,274	942	...	2,216	
83	"	Kudari	684	705	138	...	1,527	
84	"	Gora Chhirya	...	...	973	...	973	
85	"	Gadbya	...	...	1,077	...	1,077	
86	"	Gararna	907	1,503	268	61	2,739	
87	"	Gadrai	...	...	737	...	737	
88	"	Gohan	...	...	1,660	...	1,660	
89	"	Gohani	...	571	1,256	...	1,827	
90	"	Kailaur	...	1,330	2,380	...	3,710	
91	"	Kbudadadpur	...	...	598	...	598	
92	"	Kincharpura	495	1,642	606	79	2,822	
93	"	Khailari	621	1,240	240	1	2,102	
94	"	Kusmara	1,058	3,415	519	...	4,992	
95	"	Galampur	...	...	597	187	784	
96	"	Madhogarh	...	73	5,878	...	5,951	
97	"	Maktaura	...	...	1,225	...	1,225	
98	"	Majhouna	2,234	874	702	29	3,839	
99	"	Majith	...	...	3,516	...	3,516	
100	"	Malupura	...	...	924	...	924	
101	"	Mirzapur	541	1,179	481	...	2,201	
102	"	Megni	...	...	2,345	443	2,788	
103	"	Maupura	...	...	1,319	340	1,659	
104	"	Nanauli	...	...	1,173	455	1,628	
105	"	Nichaori	25	1,241	87	...	1,353	
106	"	Newari	...	...	237	...	237	
107	"	Nawada	...	...	965	...	965	
108	"	Nawor	...	...	3,381	...	3,381	
109	"	Haranli	...	...	3,215	209	3,424	
110	"	Hengota	...	750	419	...	1,169	
Pargana Kunch.								
1	Kunch	Ingoi (Khurd)	64	707	188	...	959	
2	"	Aindha	1,466	1,314	149	63	2,932	
3	"	Atagaon	...	580	325	...	905	
4	"	Asupura	16	234	64	33	347	
5	"	Itaura	...	294	...	22	316	
6	"	Ingoi	315	187	4	...	506	
7	"	Badanpura	281	44	75	21	421	



## List of villages irrigable by the Betwa Canal—(concluded).

Number.	Pargana.	Mauza.	Nature of soil.				Total.	Remarks.
			Már.	Kábar.	Parwa.	Others.		
Pargana Kunch—(concluded).								
8	Kunch	... Babupura	119	421	25	1	566	
9	"	... Barora	1,832	3,843	245	...	5,920	
10	"	... Badherra	...	146	91	217	454	
11	"	... Bobra	2,511	178	...	...	2,689	
12	"	... Basob	586	1,028	1,244	...	2,868	
13	"	... Paretha	103	63	22	...	188	
14	"	... Bhadebbhara	985	293	175	58	1,511	
15	"	... Pandri	2,545	903	495	...	3,943	
16	"	... Pipri	3,240	882	148	...	4,270	
17	"	... Pindari	1,323	198	...	...	1,518	
18	"	... Basti	231	725	13	...	972	
19	"	... Tarsanpura	347	93	...	...	440	
20	"	... Tapur	4	831	18	...	353	
21	"	... Joojrajpura	408	35	...	...	443	
22	"	... Jaurolic	...	260	261	1	522	
23	"	... Chandni	98	965	794	103	1,960	
24	"	... Chelhani	2,085	12	...	...	2,097	
25	"	... Jaitpura	309	2,228	7	15	2,559	
26	"	... Chamarsaui	1,355	118	...	...	1,473	
27	"	... Chamari	558	310	...	...	868	
28	"	... Chumputpura	977	...	...	...	977	
29	"	... Chandori	1,025	364	208	150	1,747	
30	"	... Jojbarra	...	34	141	...	175	
31	"	... Dabkai	119	374	...	...	493	
32	"	... Dhondhai	257	470	...	...	727	
33	"	... Rampur Sonelita	125	395	40	...	560	
34	"	... Sonelita	233	210	33	...	476	
35	"	... Sonya	30	1,372	512	103	2,017	
36	"	... Sakhpur	...	...	472	...	472	
37	"	... Kunch	713	1,221	898	13	2,845	
38	"	... Khanwan	256	324	16	...	596	
39	"	... Kudya	422	1,398	111	...	1,931	
40	"	... Konda	...	2,422	427	...	2,849	
41	"	... Kudra (Bazarg)	2,032	3,050	...	...	5,082	
42	"	... Kathila	1,064	1,234	244	287	2,829	
43	"	... Kahakul	15	506	...	...	521	
44	"	... Kallia	2,916	5,922	134	532	9,504	
45	"	... Kamina	...	521	205	10	736	
46	"	... Ghasya	395	629	146	42	1,212	
47	"	... Gahardhanpura	340	25	...	...	365	
48	"	... Gondauli	416	1,274	132	55	1,877	
49	"	... Goranpura	179	689	46	..	914	
50	"	... Lona	306	502	499	10	1,317	
51	"	... Mangra	...	467	124	...	591	
52	"	... Mahuoda	11	308	124	...	443	
53	"	... Nagpura	...	358	117	..	475	
54	"	... Hingota	...	1,245	...	1,186	2,431	

W. P. VONDER HÖRST,

15th December, 1888.

Executive Engineer, Betwa Canal Division.

## BETWA CANAL DIVISION.

District.	RABI, 1885-86.				KHARIF, 1886-87.				RABI, 1886-87.				KHARIF, 1887-88.				RABI, 1887-88.			
	No. of villages.	No. of khalbas.	Area.	Water-rate.	No. of villages.	No. of khalbas.	Area.	Water-rate.	No. of villages.	No. of khalbas.	Area.	Water-rate.	No. of villages.	No. of khalbas.	Area.	Water-rate.	No. of villages.	No. of khalbas.	Area.	Water-rate.
Jalau	228	624	12,166	Rs. a. p. 13,641 15 3	168	399	2,677	4,760 2 3	209	636	5,929	16,020 3 9	183	410	2,290	12,189 5 7	365	1,096	21,721	51,408 6 7
Hampur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	11	108	153 10 9
Jhansi	2	8	160	152 6 6	...	...	...	...	2	...	2	2 6 9	...	...	...	...	4	5	16	28 1 0
Total	230	627	12,356	13,794 4 9	168	399	2,677	4,760 2 3	211	636	5,931	16,022 10 6	183	410	2,290	12,189 5 7	375	1,112	21,845	51,590 2 4

W. P. VONDER HÖRST,  
Executive Engineer, Betwa Canal Division.